













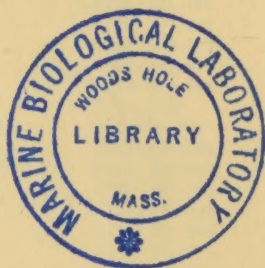


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# CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

VOLUME 8

1965



*Compiled by*

F.A.O. Fisheries Biology Branch

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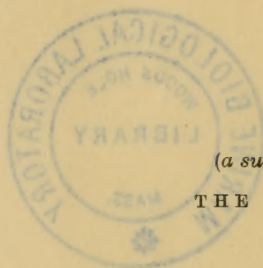
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CURRENT BIBLIOGRAPHY  
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# CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

World List Abbreviation: *Curr. Bibliogr. aquat. Sci. Fish.*

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# CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

## VOLUME 8—EXPLANATION OF COVERAGE ARRANGEMENT

### 9. ERRATA AND ADDENDA TO "EXPLANATION OF COVERAGE AND ARRANGEMENT" (contd.)

### 3. REFERENCES

Delete the previously amended second paragraph and enter the following in its stead:

"Each entry consists of a reference (including titles) and indicative annotation, an entry number of 6 digits for series 57-, 58-, 59-, and 60- and 7 digits for series 61- and 62-; the first two digits of which refer to the year of accession to this Bibliography (not to the year of publication of the document cited). Starting from Volume 8, the entry numbers follow a numerical sequence only in the parts in which they are entered, but do not follow any sequence in the entire volume. The digit(s) preceding the hyphen refer to the volume number, followed by a 5-digit number the first 2 digits of which indicate the part number, the remaining 3 digits being the true entry number of the reference entered in a part,

e.g.      8   -   01                      364                      "

$\underbrace{\hspace{1.5cm}}$     $\underbrace{\hspace{1.5cm}}$     $\underbrace{\hspace{1.5cm}}$

            Volume   Part   Entry number

   in part

### 3.1 Authors

#### *Names and Abbreviations of Organizations and Projects*

Insert in alphabetic order the following:

CCCAS	..	see SEASCO
CEPAL	..	see ECLA
COI ..	..	see IOC (UNESCO)
ECLA (UN)	..	Economic Commission for Latin America (UN)
		Comisión Económica para America Latina (UN)
IABO (IUBS)	..	International Association of Biological Oceanography
		(International Union of Biological Sciences)
IAMS ..	..	International Association of Microbiological Societies
		Société Internationale de Microbiologie
		Asociación Internacional de las Sociedades de
		Microbiología
JFRCA	..	Japanese Fisheries Resource Conservation Association
NEAFC	..	North East Atlantic Fisheries Commission
		Commission des Pêcheries du Nord-Est Atlantique

SCTR/OAU	..	Scientific Commission for Techniques and Research. Organization of African Union Commission Scientifique, Technique et de la Recherche. Organisation de l'Unité Africaine
SCIBP	..	Special Committee, International Biological Programme
SEASCO	..	South East Asia Science Cooperation Office Poste de coopération scientifique pour l'Asie du Sud-Est Centro de Cooperación Científica de Asia Sudoriental

Insert under IOC (UNESCO) the following French name to follow the present English name:

Commission Océanographique Intergouvernementale

## 5. INDEXES

### 5.1 *Author*

In amended version of paragraph one, line two, correct:

“ Marine Library Association ”

to read

“ American Library Association ”.

# CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

## VOLUME 8—EDITORIAL NOTE

It is with great regret that we announce that, as from 1st July 1965 and until further notice, the Aquatic Sciences Information Retrieval Center will not be able to undertake computer searches of indexed literature (see Editorial Notes 3 (3) : N 2-3).

It is hoped that means will eventually be found to revive and develop this service.



# CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

## VOLUME 8—ADDENDA

8-001ad to 8-029ad

- Footnote:* Issued also as: *Aust. Fish. Leaf.*, (3). 8-001ad  
(61-04691)
- Footnote:* Issued also as: *Bull. Sea Fish. Res. Sta., Haifa*, (31). 8-002ad  
(61-07951)
- Footnote:* Issued also as: *Aust. Fish. Leaf.*, (5). 8-003ad  
(61-10150)
- Original title:* Sravnitel'naia biokhimicheskaiia kharakteristika 8-004ad  
nekotorykh presnovodnykh bespozvonochnykh i ryb (61-12526)
- Original title:* Ocherk flory vodoroslei zapovednika Kemeru. 8-005ad  
(Rizhskii zal. v Lat. SSR) (61-13033)
- Original title:* Soderzhanie mineral'nykh elementov v miase ryb 8-006ad  
(62-00444)
- Annotation:* Contains an annotated list of species, comments 8-007ad  
regarding seasonal population dynamics, size ranges, ecological (62-03272)  
requirements of preferences.
- Reference:* *Zool. Jb. allgem. Zool.*, 69 (15/7) : 63-94 8-008ad
- Original title:* Lernkapazität, Gedächtnis und Transpositions- (62-04476)  
vermögen bei Forellen
- Reference:* 306-12 8-009ad
- Original title:* Die Photosynthese von Meerespflanzen in ihrer (62-05874)  
Beziehung zum Salzgehalt
- Author:* & R. Moav 8-010ad  
(62-06131)
- Footnote:* Abstract only. 8-011ad  
(62-06468)
- Footnote:* Issued also as: *Aust. Fish. Leaf.*, (7). 8-012ad  
(62-02188)
- Footnote:* Issued also as: *Mar. Repr. Mar. Lab., Aberdeen*, (209). 8-013ad  
(8-04003)
- Footnote:* Issued also as: *Aust. Fish. Leaf.*, (4). 8-014ad  
(8-04237)
- Footnote:* Issued also as: *Aust. Fish. Leaf.*, (6). 8-015ad  
(8-04380)



<i>Footnote:</i> Issued also as: <i>Mar. Repr. Mar. Lab., Aberdeen</i> , (189).	8-016ad (8-05115)
<i>Footnote:</i> Issued also as: <i>Mar. Repr. Mar. Lab., Aberdeen</i> , (190).	8-017ad (8-05120)
<i>Footnote:</i> Issued also as: <i>Mar. Repr. Mar. Lab. Aberdeen</i> , (191).	8-018ad (8-05138)
<i>Original title:</i> Mineral'nyi sostav nekotorykh vidov ryby i proverka sootnosheniia nezhdou soderzhaniiem mineral'nykh elementov i belka	8-019ad (8-09281)
<i>Footnote:</i> Issued also as: <i>Contr. Coll. Fish. Univ. Wash.</i> , (124).	8-020ad (8-10402)
<i>Footnote:</i> Issued also as: <i>Contr. Coll. Fish. Univ. Wash.</i> , (93).	8-021ad (8-10407)
<i>Footnote:</i> Issued also as: <i>Contr. Coll. Fish. Univ. Wash.</i> , (102).	8-022ad (8-10410)
<i>Footnote:</i> Issued also as: <i>Contr. Coll. Fish. Univ. Wash.</i> , (98).	8-023ad (8-10415)
<i>Footnote:</i> Issued also as: <i>Mar. Repr. Mar. Lab., Aberdeen</i> , (186).	8-024ad (8-11038)
<i>Footnote:</i> Issued also as: <i>Bull. Sea Fish. Res. Sta., Haifa</i> , (31).	8-025ad (8-11144)
<i>Footnote:</i> Issued also as: <i>Aust. Fish. Leaflet</i> , (8).	8-026ad (8-11181)
<i>Footnote:</i> Issued also as: <i>Contr. Coll. Fish. Univ. Wash.</i> , (84).	8-027ad (8-11283)
<i>Footnote:</i> Issued also as: <i>Mar. Repr. Mar. Lab., Aberdeen</i> , (199).	8-028ad (8-12083)
<i>Author:</i> <b>G. Wohlfarth &amp; M. Lahman</b>	8-029ad (62-03937)



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*Science*, 136 (3516) : 639-40

[Announcements]

M

8-01001

Incl. announcements of completion of joint Israeli, Dutch and US oceanographic expedition to Red Sea as part of HIOE and of placement of a submersible test unit (STU) by US Naval Engineering Laboratory of Port Hueneme at 5300 depth off California to study environmental deteriorating effects.

**Sanderson, A. E., Jr.** (1962)

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Monaco, 49 p.

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**IHB. Activities Committee** (1960)

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Report of the IHB Activities Committee appointed by the 7th International Hydrographic Conference (report dated April 1960)

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*Sarasota*, 15 p.

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*Rep. Kenya Fish.*, (1961) : 24 p. 8-01030

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*Fish. Statist. Can. (A)*, 1960 : 65 p. 8-01032

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*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 1-2 8-01033  
 Prospectus—IPFC 9th session symposium

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*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 125-7 8-01035  
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The life story of the fish: his morals and manners

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8-01040

NE B. Curtis, 1949. Covers the evolution of the fish, its physiology, surface, skeleton, vision, hearing, equilibrium, temperature sense, pain, nervous system; the digestive, breathing, excretory, and circulatory systems; courtship, mating, care of young; and similar phenomena. The salmon and trout are singled out for a special chapter, while relevant information is given about many game fish.

**Fraenkel, G. S. & D. L. Gunn** (1961)

New York, Dover Publ., 376 p.

The orientation of animals: kineses, taxes and compass reactions

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8-01041

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**Canada. Department of Fisheries** (1961)

*Rep. Dep. Fish. Can.*, 30, 1959 : 94 p.

Report under following headings: Conservation and development service; Department vessels; Inspection and consumer service; Economics service; Information and educational service; Industrial development service; Fishermen's idemnity plan; Fisheries Prices Support Board; Fisheries Research Board of Canada; International commissions; Special committees; The fishing industry; Statistics of the fisheries. Appendix: Financial statements, 1959-1960; Fish culture development statements.

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*Rep. Dep. Fish. Can.*, 31, 1960 : 94 p.

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*Proc. Pacif. Sci. Congr.*, 9 (10) : 91 p.

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 Re 59-3359.

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 Re 61-03934.

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*Phycologia*, 1 (1) : 1-3 8-01050  
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Brief view of recent steps taken to improve cooperation in the field of phycology, and gives the origin and scope of the new society.

- Silva, P. C. (1961)** G  
*Phycologia*, 1 (1) : 4-7 8-01051  
 The national phycological societies

Lists existing phycological societies, with brief notes on their origins, scopes and activities; publications and officers.



G  
8-01052**Wynne-Edwards, V. C.** (1962)

London, O. &amp; B., 653 p.

Animal dispersion in relation to social behaviour

Exposition of largely novel theory ascribing to much social behaviour in all groups of animals the function of maintaining population density below starvation level.

## PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

M

**France. Comité Central d'Océanographie et d'Étude des Côtes** (1961) 8-01053*Cah. océanogr.*, 13 (9) : 607-79

Contains sections on general information, technical notes: 62-06403, 62-06404 and 8-01054; documentation received by secretariat, and tables and diagrams of observations: 8-01055.

M

**Raison, J. P.** (1961)

8-01054

*Cah. océanogr.*, 13 (9) : 636-51

La falaise et l'estran rocheux du Cap d'Alprech (Pas-de-Calais) (The cliff and the rocky strand of Cape d'Alprech (Pas-de-Calais) )

Describes the general stratigraphy and tectonic.

M

**Anon.** (1961)

8-01055

*Cah. océanogr.*, 13 (9) : 667-79

Résultats d'observations (Results of observations)

Various observations made by French navy vessels during 1960 in the Coral Sea, Tasmanian Sea and South Pacific. Tables of data on temperature and salinity.

M

**Anon.** (1962)

8-01056

*Science*, 136 (3515): 561-79

New products

Incl. note—p. 572—on new oceanographic data-recording capsule produced by Edgerton, Germeshausen & Grier, USA.

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Wilmette, Ill., Army Cold Regions &amp; Engng Lab., 58 p.

Composition of sea ice and its tensile strength

M

**Alkire, H. L.** (1962)

8-01058

*Chesapeake Sci.*, 3 (1) : 50

Atlantic hurricanes

Re 8-01333

**Eriksson, E. (1962)**  
*Deep-Sea Res.*, 9 : 1-9  
 Oceanic mixing

M  
 8-01059

Model of ocean circulation presented which accounts both for the actual features of the circulation of sea-water as closely as possible and for the actual distribution of phosphorus, oxygen and carbon-14 in surface, intermediate and deep water. Model makes it possible to evaluate transport by gravity from sea surface of various elements in sinking particulate matter.

**Wyrki, K. (1962)**  
*Deep-Sea Res.*, 9 : 11-23

M  
 8-01060

The oxygen minima in relation to ocean circulation

Distribution of oxygen in the ocean, as it is influenced by consumption and circulation, is discussed, and discrepancies in earlier theories are resolved. Curves of vertical distribution of oxygen in oxygen minimum layer are calculated and compare well with observations. It is concluded that oxygen minimum layer is caused by biochemical process of oxygen consumption, that its position and distribution are determined by circulation, and that shape of oxygen profile, especially high position of its minimum, is due to exponential decrease of oxygen consumption.

**Rattray, M., Jr. (1962)**  
*Deep-Sea Res.*, 9 : 25-37

M  
 8-01061

Interpolation errors and oceanographic sampling.

Formulae are derived which can be used to give an interpolated value for an oceanographic variable and to estimate the accuracy of the interpolation. Utilization of these permits determination of optimum sampling programmes which, with a minimum number of observations, yield the distribution of a variable to a prescribed accuracy.

**Steele, J. H. & D. W. Menzel (1962)**  
*Deep-Sea Res.*, 9 : 39-49

M  
 8-01062

Conditions for maximum primary production in the mixed layer

Theoretical relations are developed which determine primary production and chlorophyll *a* concentration in terms of the depth of the mixed layer and a factor  $f(N)$  for the effects of nutrient limitation. General consequences of variations in depths of mixed layer are discussed and theory is applied in detail to data from Sargasso Sea off Bermuda.

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Gulf Stream, as it passes the southern extremity of the Grand Banks, transports water whose oxygen density relationship closely resembles the Sargasso Sea average established by Richards & Redfield, 1955. It is suggested that Gulf Stream does not turn to northward after passing the Grand Banks but continues to flow in a southeasterly direction, and that the currents which pass the Flemish Cap are part of a separate, northerly gyre. Water budget consistent with distribution of oxygen is presented.

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 Trends and discoveries—The colour dance of hungry plankton

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 Responses of *Calanus finmarchicus* (Gunnerus) to changes of hydrostatic pressure

Results obtained in tank experiments at Port Erin, show that the ability to perceive, and respond to, changes in hydrostatic pressure is definitely developed in *C. finmarchicus helgolandicus*, but the nature of the response is very variable under laboratory conditions. Results do not indicate any major differences between the pressure responses of animals of different sex, stage or origin.



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*Craspedacusta* in the southeastern United States

Distribution of freshwater medusa is reviewed and extended by 10 new locality records. Specimens from 12 localities were studied to determine sex. Collections from two of new localities found to incl. both males and females. *C. sowerbii* is reported for the first time from North Carolina.

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DA 22 (12) : 4145-6. Investigated in stream in south central portion of Lower Peninsula of Michigan. Gravimetric net production estimates made from periphyton harvested from plexiglass substrata which had been submerged in the stream. Colorimetric productivity measurements made by relating absorbancy of phytopigments extracted from the periphyton colony to the ash-free dry weight of the colony. Good agreement was noted between the two methods. Diurnal oxygen curves were found to be unsuitable for year-round productivity measurements. A model describing primary energetics was synthesized from observed data and literature values.

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*Triops granarius* (Lucas) (Crustacea) as a natural enemy of mosquito larvae

Predators of *Anopheles gambiae* in pools in central-north Somalia.

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Effects of gamma radiation on two decapod crustaceans, *Palaemonetes pugio* and *Uca pugnax*

Subjected to graded doses of cobalt-60 gamma radiation. Dose required to kill 50% of the animals within 7 days, and 30 days was calculated. Prolongation of intermolt period was observed.

**Pfitzenmeyer, H. T.** (1962)

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*Chesapeake Sci.*, 3 (2) : 114-20

8-01179

Periods of spawning and setting of the soft-shelled clam, *Mya arenaria*, at Solomons, Maryland

Larvae and spat samples were taken weekly from the end of a pier in approximately 6 feet of water. Periods of abundance which were correlated with daily surface water temperatures and salinities, indicated two annual periods of spawning and setting. Examination of gonad revealed that two peaks of spawning are the result of two separate maturations and not a cessation in spawning due to the high summer temperatures.

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Distribution of species of *Cliona* (boring sponge) on the eastern shore of Virginia in relation to salinity

4 spp. occur on both seaside and bayside of the eastern shore peninsula of Virginia.

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8-01181

Preliminary survey of fungistatic properties of marine algae

CFA 15 (7) : 15-6. Algae collected at depths to 30 feet from coral reefs and mangrove islands from the coast of California. Total of 68 homogenized preparations representing 35 distinct spp. of algae were tested against six fungi. The test organisms were *Aspergillus niger*, *Penicillium* sp., *Mucor racemosus*, *Rhizopus oryzae*, *Candida albicans*, and *Cryptococcus neoformans*.

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Distribution and variation of *Branchiostoma caribaeum* in Mississippi Sound  
  
Literature indicates its abundance on parts of western Florida coast, but not recorded in abundance along the northern Gulf coast. Quantitative collections by modified Petersen grab showed sp. present in numbers up to 73 per square meter in Mississippi Sound and a little way outside the barrier islands from Mobile Bay to Louisiana, an area of about 350 square miles.
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 An annelid proprioceptor

Structure of *Harmothoe* is in most respects typical of errant polychaetes, but on dorsal side are scales which most polychaetes do not have. Methylene blue preparations reveal types of sense organs.

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- Powell, A. W. B.** (1961)  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 8  
 Mollusca from the Kermadec Islands, a marginal Indo-Pacific area

Abstr. only. Symposium on biology of aquatic animal life in the tropics with special reference to the Indo-Pacific area.

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 A note on the systematics of the Brachyura and the morphology of commensal species

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 New knowledge of the marine invertebrate fauna of Viet-Nam

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- Schmid, O. J.** (1962)  
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 Die Inhaltsstoffe der Meeresalgen (The constituent substances of marine algae). En Fr

Describes basic constituent substances of brown algae, namely alginic acid and its compounds, laminaran, fucoidan, mannitol, and the red algae products: agar, carrageenan, eucheuman, funoran, furcellaran, hypnean, iridophycan and phyllophoran.

**Schulzen, H.** (1962)M  
8-01205*Bot. mar.*, 3 (Suppl.) : 75-85Die chemisch-physikalischen Eigenschaften der Alginat und Carrageenat  
(The chemical physical properties of alginates and carrageenates). En FrDefines the characteristic differences between alginates and carrageenates,  
with special emphasis on the techniques of their application.**Maass, H.** (1962)M  
8-01206*Bot. mar.*, 3 (Suppl.) : 86-100Über die Verwendungsmöglichkeiten von Alginaten (On the application  
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Discusses important industrial fields of application of alginates.

**Schmid, O. J. & H. A. Hoppe** (1962)M  
8-01207*Bot. mar.*, 3 (Suppl.) 101-19Meeresalgen als Dünge-, Futter- und Nahrungsmittel (Marine algae used  
as fertilizers, feeding and food material). En FrIn 3 chapters: Marine algae as fertilizer; Fodder; Food. Reviews the pro-  
duction and consumption of these products in different countries.**Hoppe, H. A. & O. J. Schmid** (1962)M  
8-01208*Bot. mar.*, 3 (Suppl.) : 16-66Meeresalgen als moderne Industrieprodukte (Marine algae as modern  
industrial products). En FrDiscusses terms and definitions of certain groups of marine algae as raw  
materials, collective nouns and designations for products made of brown and  
red algae, with notes on the distribution of the spp. and methods used in the  
collection and production. Incl. bibliographic list.**van Baalen, C.** (1962)M  
8-01209*Bot. mar.*, 4 (1-2) : 129-39

Studies on marine blue-green algae. Fr Es De

Blue-green algae have been isolated from inshore marine environments  
using the test tube culture method developed by Myers and the ASP<sub>2</sub>  
medium suggested by Provasoli *et al.* Some aspects of the physiology and  
nutrition of the cultures have been examined. No marked heterotrophic  
ability was found with any of the cultures, using as substrates glucose, acetate,  
lactate, casamino acids, and complex organic materials.



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Über jahres- und lunarperiodische Erscheinungen bei einigen Braunalgen (On the year and lunar periodicity phenomena in some brown algae). En Fr Es

Reports results on the development of sporangia of *Ectocarpus siliculosus* under different culture conditions—temperature and light. On *Dictyota*, the lunar periodicity in releasing the sexual cells can be repeated under controlled experimental conditions.

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**Fetzmann, E. & H. Kusel** (1962) 8-01211  
*Bot. mar.*, 4 (1-2) : 175-83

Über Bau und Wachstum der Zellwände einiger Ceramiales (On the construction and growth of cellwalls in some Ceramiales). En

The cellwalls of *Bornetia secundiflora*, *Griffithsia opuntiioides*, *G. schousboei* and *Neomonospora furcellata* were studied. *i n* HCl, *i n* NaOH or chlor-zinc-iodine cause a heavy swelling of the whole wall. In this way a clear lamellate structure becomes visible.

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**Ono, Y.** (1960) 8-01212  
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(Interrelation among individuals of a fiddler crab, *Ilyoplax pusillus* De Haan—2. The regulatory mechanism at high population density). Ni En

Effects of high population density on behaviour, distribution of nests and dispersal studied by using experimental cages set on natural habitat of crab.

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*J. Morph.*, 110 (1) : 19-39

Early settlement and metamorphosis of the barnacle *Balanus amphitrite niveus*

Preliminary to comprehensive investigation of mode of action of anti-fouling shipbottom paints, study of settling and attachment was initiated. Living animals were observed directly and critical stages were fixed for histological and histochemical study. A transitional stage which has been neglected by previous workers was intensively studied. Identification of 5 distinct stages in metamorphosis of *B. amphitrite niveus*, morphology of larvae and sequence of changes incident to attachment described.

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 Transportation of oyster drills by horseshoe " crabs "
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 Phycology in India

Re 8-0122.

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8-01226  
*Chesapeake Sci.*, 3 (2) : 129-30  
 Callico crab, *Ovalipes o. ocellatus* in mid-Chesapeake Bay, Maryland

Medium-sized female dredged from an oyster bar at a depth of 30 feet off Cove Point, Calvert County, on 30 Mar. 1962. Upstream occurrence seems related to the unusual hydrographic and stormy conditions of the second week of March.

- Papenfuss, G. F.** (1961) MF  
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*Phycologia*, 1 (1) : 8-31  
 The structure and reproduction of *Caloglossa leprieurii*

Present study supports placement of *Caloglossa* in a separate group within the Delesseriaceae. *Taenioma* is here removed from the *Sarcomenia* to the *Caloglossa* group. The question of the systematic position of the *Sarcomenia* group is discussed.

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*Batophora* from central New Mexico

Contains information on the regional distribution and ecology of this tropical marine and brackish-water green algae.

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 Phycological activity in Czechoslovakia

Reviews scientific activities in this field and future lines of development; incl. references to work in connection with fisheries and industrial use of algae.

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 On the structure and functions of polychaete septa

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 Corals at the mouth of the Rewa River, Viti Levu, Fiji

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Bivalved gastropod from Jamaica

*Berthelinia* Crosse (= *Tamanovalva* Kawaguti & Baba) has been reported from Japan, Australia and California. A second genus, *Midorigai* Burn, has been described from Australia. This communication records *Berthelinia* from Jamaica. First specimen found on *Caulerpa verticillata* Agardh growing on rocks in an open part of a mangrove channel near Port Royal on 8 Jan., 1962. Small quantities of algae collected on 11 and 16 Jan. yielded 50 more specimens.

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**Levring, T.** (1962)  
*Bot. mar.*, 3 (Suppl.) : 9-11  
The vegetation in the sea

A brief review of general systematic classification of algae with special reference to economically important genera.

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**Hoppe, H. A.** (1962)  
*Bot. mar.*, 3 (Suppl.) : 12-5  
Geschichtliche Entwicklung der Auswertung von Meeresalgen (Historical development of the evaluation of marine algae). En Fr

Brief historical review of economical use of algae and products extracted from marine spp.

MF  
8-01235

**Desikachary, T. V.** (1961?)  
*Proc. Summer Sch. Bot. Darjeeling*, 1960 : 77-87  
Electron microscope studies on algae

BSEA 8 (7) 4130.

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**Föyn, B.** (1962)  
*Bot. mar.*, 4 (1-2) : 156-62  
Two linked autosomal genes in *Ulva mutabilis*. Fr Es De

Two recessive autosomal mutants, "branched" (*br*) and "precocious" (*pre*), are described which arose spontaneously in cultures of *U. mutabilis*.

F  
8-01237

**Brown, H. P. & M. M. Jenkins** (1962)  
*Science*, 136 (3517) : 710  
A protozoan (*Dileptus*: Ciliata) predatory upon Metazoa

Common holotrich, may function as a predator upon a variety of metazoan animals representing phyla Cnidaria, Platyhelminthes, Aschelminthes, Annelida and Mollusca. Very young animals and wounded animals are especially vulnerable.



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*Proc. R. ent. Soc. Lond.*, 35A : 91-2  
 The British distribution of the water-bug *Velia saulii* Tamanini with some notes on alary polymorphism

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8-01239
- Oundle School Natural History Society (1960)**  
 41 p.  
 Report 1959

Faunistic notes on Cladocera, leeches and Platyhelminthes. Study of a population of *Chlorohydra viridissima* in a local pond.

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- Hart, C. W. (1961)\***  
*Not. nat. Acad. Philad.*, (342) : 3 p.  
*JONGA*, a new genus of freshwater atyid shrimps (Decapoda, Atyidae)

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8-01241
- Kessler, E. & C. J. Soeder (1962)**  
*Nature, Lond.*, 194 (4833) : 196-7  
 Biochemical contributions to the taxonomy of the genus *Chlorella*

States that the taxonomy of the critical section *Euchlorella* of the genus *Chlorella* can be based on some physiological and biochemical characteristics which can easily be determined.

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8-01242
- Manton, I. & G. F. Leedale (1961)**  
*Phycologia*, 1 (1) : 37-57

Observations on the fine structure of *Paraphysomonas vestita*, with special reference to the Golgi apparatus and the origin of scales

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8-01243
- Sachs, T. & A. M. Mayer (1961)**  
*Phycologia*, 1 (4) : 149-59

Studies on the relation between metabolism and phototaxis of *Chlamydomonas snowiae*

Studies the effect of various factors; constant shaking, use of young cultures, previous treatment with darkness, substances accumulating in growth medium, metabolic inhibitors.

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8-01244
- Moore, W. G. & L. H. Ogren (1962)**  
*Tulane Stud. Zool.*, 9 (5) : 315-8

Notes on the breeding behavior of *Eubbranchipus holmani* (Ryder)

Activities are described and environmental factors, especially water temperature, known to be associated with such activity, are reviewed. Various aspects of breeding behavior, incl. preliminary positioning, clasping attempts, and successful and unsuccessful copulation are described and compared with published accounts of other spp. of Anostraca.



**Wise, C. D.** (1962)

F  
8-01245

Thesis, The Univ. of New Mexico, 347 p.

Taxonomy and ecology of fresh-water ostracods of south-central Texas

DA 22 (12) : 4165. 407 collections from 53 counties studied. Collections made during seasons from Apr. 1958, through Apr. 1960. Effect of environmental factors on distribution of ostracods; nature of bottom calcium concentration, conductance, current; permanency of waters, nature of vegetation, and animal relationships are noted in detail. Methods of collecting and preparing ostracods for study are discussed. Spp. found during study are described and figured. 25 new spp. and one new genus are described and 2 previously described genera are reported from North America for the first time. Key is incl.

**Henderson, A. E.** (1961)

F  
8-01246

Thesis, Univ. of Glasgow, U.K.

Studies on the respiratory and hydrostatic functions of the mantle cavity in two freshwater pulmonate snails

Volume changes in gas contained in mantle cavity of *Lymnaea stagnalis* and *Planorbis corneus* are studied, under laboratory conditions, by an underwater weighing technique using a torsion balance.

**Venkataraman, G. S.** (1962)

F  
8-01247

*Proc. nat. Inst. Sci. India*, 28B (1) : 77-88

Mineral nutrition of *Anacystis montana* (Lightf.) Dr. and Daily

Minimum concentrations of various major elements to produce a maximum growth of this blue-green alga under the present experimental conditions found.

**Gillham, N. W. & R. P. Levine** (1962)

F  
8-01248

*Nature, Lond.*, 194 (4834) : 1165-6

Pure mutant clones induced by ultra-violet light in the green algae, *Chlamydomonas reinhardtii*

**Strietelmeier, D. & R. B. Koch** (1962)

F  
8-01249

*Nature, Lond.*, 195 (4840) : 474-6

Modifications of green algae to be used as food

One phase in attempt to develop a high protein product for use as a food extender from a strain of *Chlorella* (Sorokin) with a high-temperature optimum for growth. It was postulated that an extraction procedure could be developed which would modify the colour and remove the bitter principle of *Chlorella*.

FG

8-01250

**Singh, R. N. (1961)**

New Delhi, Indian Council of Agricultural Research, 175 p.

Role of blue-green algae in nitrogen economy of Indian agriculture

Monograph dealing with the biology of Myxophyceae in relation to nitrogen economy of the Indian soils and waters. Contains chapters on: General characteristics of the blue-green algae, the terrestrial and other blue-green algae, methods of investigation of soil algae and their nitrogen-fixing capacity, nitrogen fixation, nitrogen fixation in rice fields, reclamation of 'usar' lands, conservation of other soils, biological productivity of inland waters with special reference to water-blooms, the role of blue-green algae in natural economy, references.

FG

8-01251

**Cohen, P., J. J. Powers & D. E. Pratt (1962)***Bot. mar.*, 4 (1-2) : 163-74

Industrial food wastes as substrates for the growth of algae. Fr Es De

Both *Chlorella vulgaris* var. *viridis* and Sorokin's *Chlorella*, a thermophilic alga, exhibited the most notable overall effects when grown on an okra-basal medium. Gibberellic acid and potassium gibberellate both produced slight acceleration during the initial growth stages of the algae and larger cells as compared microscopically with cells grown in the basal control. Basamibact produced algae with a high nitrogen content. Essential amino acid values obtained in this study compare favorably with results by other investigators.

G

8-01252

**Grimm, H. (1961)***Biom.-Prax.* 2 (1) : 1-18

(Some problems in bacterial counting). Fr

STA 3 (3) 3/333. Following points are discussed: 1. type of distribution of particles will be recognized by plotting on Poisson cumulative probability paper. The various curves—Poisson, binomial, negative binomial, Neyman, log-series—become evident from this diagram, and their parameters may be estimated by means of transparent stencils. Some empirical distributions are discussed; 2. in counting particles, time may be saved when a modified counting method is employed. The mean and standard error are estimated from the censored Poisson. A little loss in precision is compensated by an essential saving in time; 3. Evidence is given of the difficulties involved in photoelectric counting.

G

8-01253

**Hollis, J. H. & A. C. Chester (1961)***Psychol. Rep.*, 8 : 148

An invertebrate stimulator

PA 36 (1) : 58. Apparatus for holding and stimulating small invertebrates is described. Behavioral investigations such as habituation and conditioning are made possible and a variety of stimuli may be presented.

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- Bellini, L.** (1962) M  
8-01254  
*Corr. d. Pesca*, 18 (15) : 1  
 La pesca nel Perú (Fisheries in Peru)  
 Note on UNSF FAO project and the anchoveta fishery
- Tiews, K.** (1962) M  
8-01255  
*Veröff. Inst. Küsten-u. Binnenfisch.*, (25) : 53 p.  
 Experimental trawl fishing in the Gulf of Thailand and its results regarding the possibilities of trawl fisheries development in Thailand.  
 Results of pelagic and demersal trawling experiments in 1961 under bilateral agreement, German technical aid program. Review of existing fisheries and background, and recommendation for further development; charts, designs of gears, estimates of resources.
- de Menezes, R. S.** (1960)\* M  
8-01256  
 Bahia, Brazil, 20 p.  
 Informações sobre a pesca marítima no nordeste Brasileiro (Estado do Maranhão à Bahia) (Information on the sea fisheries in the northeast of Brazil—States of Maranhão and Bahia)
- Burney, M. A.** (1962) M  
6-01257  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (2) : 76-9  
 Fishing boats of West Pakistan  
 Do 60-002me.
- Hamuro, C.** (1962) M  
8-01258  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (2) : 84-9  
 Studies on mid-water trawl gears and mid-water telemeters  
 Do 60-002me.
- Takayama, S. & T. Koyama** (1962) M  
8-01259  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (2) : 90-2  
 Application of net gauge to midwater trawling  
 Do 60-002me.
- Kow, T. A.** (1962) M  
8-01260  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 7-16  
 The formulation of a fisheries development programme  
 Do 60-002me.

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**Bottemanne, C. J.** (1962) M  
8-01261  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 34-8  
 Programme of fisheries development

Do 60-002me.

**Angot, M.** (1962) M  
8-01262  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 49-58  
 Fishery problems in the French territories of the Pacific. *En Fr*

Do 60-002me.

**Anon.** (1962) M  
8-01263  
*New Commonw.*, 40 (5) : 299-301  
 Mechanising Commonwealth fisheries

TA 17 (8) j2159. Fishing industries in many parts of the British Commonwealth have been revolutionized by the introduction of outboard motors for small craft. A review is given of the development in the mechanization of fisheries in various countries such as Ceylon, India, Jamaica, Uganda, Malaya, etc.

**Anon.** (1962) M  
8-01264  
*Andean Air Mail*, 22 (1111) : 12  
 Ecuador. Under-exploited riches

TA 17 (8) j2163. The development of the fishery industry in Ecuador is described.

**FAO** (1962) M  
8-01265  
*Rep. FAO/EPTA* (1530) : 48 p.

Report to the Government of Chile on development needs of the fishery industries, based on the work of C. J. Molteno, FAO/TA Fisheries Economist

Report on FAO project carried out under UN Expanded Programme of Technical Assistance. General observations on the state of the industry and recommendations; the trawl fishery; the fish meal and oil industry of the North; the independent fishermen. Gives recommendations for further development.

**Holm, J. L.** (1962) M  
8-01266  
*Norsk Hvalfangsttid.*, 51 (6) : 225-49  
 Participation, production and price conditions in the small-whale fisheries 1938-1960. *En No*



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**Best, E. A.** (1961)

M  
8-01267

*Bull. Pacif. Mar. Fish. Comm.*, (5) : 47 p.

Savings gear studies on Pacific coast flatfish

Reports mesh selection tests carried out on *Microstomus pacificus*, *Parophrys vetulus* and *Eopsetta jordani* for single and double cotton mesh cod-ends and manila hog-ring bags. Gives selection ogives and 50% selection lengths.

**International Group of Consulting Engineers** (n.d.)

M  
8-01268

The Hague, mimeo, 9 p.

Fishing industry demonstration project survey of the objectives, execution and results of an investigation into the German fishing industry

**Dexter, C.** (1962)

M  
8-01269

*Fish. Yearb. Direct.*, 1962 : 13-30

The British fishing industry

**Olafsson, D.** (1962)

M  
8-01270

*Fish. Yearb. Direct.*, 1962 : 31-4

Icelandic fisheries and exports

**Meseck, G.** (1962)

M  
8-01271

*Fish. Yearb. Direct.*, 1962 : 35-8

The fishing industry of the Federal Republic of Germany

**Anon.** (1962)

M  
8-01272

*Fish. Yearb. Direct.*, 1962 : 39-45

Soviet production and plans

**Anon.** (1962)

M  
8-01273

*Fish. Yearb. Direct.*, 1962 : 51-79

Around the world

Reports and tables on catches, exports, imports, canning, curing, by-products and fishing fleets from Algeria, Angola, Argentina, Australia, Austria, Canada, Ceylon, Chile, Denmark, Egypt, Ghana, Greece, Hong Kong, Israel, Japan, Lebanon, Malaya, Morocco, Netherlands, New Zealand, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Rhodesia and Nyasaland, Sierra Leone, South Africa, Spain, Sweden, Uruguay, Yugoslavia.



# FISHING

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|  | M       |
| <b>Norway. Committee for Whaling Statistics</b> (Ed.) (1962) | 8-01274 |
| <i>Int. Whal. Statist.</i> , (47) : 77 p.                    |         |

Catch of small whales in 1955/56-1959/60; whaling in 1959/60 and summer 1960; Norwegian whaling in 1959/60 and summer 1960; whaling of U.K. in 1959/60 and summer 1960; whaling of Japan in 1959/60 and summer 1960; whaling of USSR in 1959/60 and summer 1960; whaling results for the various countries in 1959/60 and summer 1960; average size of whales caught in the summer-season 1960; whales caught in the summer-season 1960, by spp., size and area; average production of oil per "blue whale equivalent" in the summer-season 1960; average production of oil per sperm-whale in the summer-season 1960; whale foetuses measured in the summer-season 1960.

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|--|---------|
|  | M       |
| <b>Norway. Committee for Whaling Statistics</b> (Ed.) (1962) | 8-01275 |
| <i>Int. Whal. Statist.</i> , (48) : 60 p.                    |         |

Whaling in the Antarctic in the season 1960/61; whaling results for the various countries in the Antarctic in the season 1960/61; average size of whales caught in the Antarctic in the season 1960/61; whales caught in the season 1960/61 in the Antarctic, by spp., sex and size; whales caught in the season 1960/61 in the Antarctic, by spp., sex and groups of size; average production of oil per blue-whale unit in the Antarctic in the season 1960/61; size of pregnant whale females caught in the Antarctic in the season 1960/61; whale foetuses measured in the Antarctic in the season 1960/61, by spp. and groups of size, in each month; whale foetuses measured in the Antarctic in the season 1960/61, by spp. and sex, in each month.

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|---|---------|
|   | M       |
| <b>Bokser, B.</b> (1961)*   | 8-01276 |
| <i>Nar. Khoz. Uzbekist.</i> , 3 (4) : 92-6                          |         |
| Bogatstva i nushdy Arala (The wealth and the needs of the Aral Sea) |         |

- |   |         |
|---|---------|
|   | M       |
| <b>Bokser, B.</b> (Anon., Transl.) (1961) | 8-01277 |
| Washington, D.C., 16 p.                   |         |
| The wealth and the needs of the Aral Sea  |         |

*En* 8-01276. Descriptors: fishes, abundance, ecology, reproduction, preservation, transportation, refrigeration systems. Available from the Office of Technical Services, Washington, D.C.

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|---|---------|
|   | M       |
| <b>Film. Johnson Motors (USA)</b> (1962)                  | 8-01278 |
| Outboard Marine International S.A., Nassau, N.P., Bahamas |         |
| Outboards at work   |         |

16 mm., colour, sound, 11 min. The film depicts various highly interesting commercial usages of the outboard motor around the world, with scenes from such diverse locations as Jamaica, Mexico, Nigeria, the Philippines, Senegal, Tanganyika, Ecuador and the Ivory Coast Republic.

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- Sette, O. E.** (1961) M  
8-01279  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 1-4  
 Report of the chairman of the Standing Committee on Pacific Fisheries
- Moiseev, P. A.** (1961) M  
8-01280  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 64-71  
 On the biological basis of fishery in the western Pacific  
 Symposium on new or little explored aspects of fishery research.
- Parrish, B. B., A. Saville & I. G. Baxter** (1962) M  
8-01281  
*Scot. Fish. Bull.*, (17) : 3-12  
 Results of Scottish herring fisheries in 1961 and prospects for 1962
- Thomas, H. J.** (1962) M  
8-01282  
*Scot. Fish. Bull.*, (17) : 16-20  
 Refrigerated storage of lobsters
- Raitt, D. F. S.** (1962) M  
8-01283  
*Scot. Fish. Bull.*, (17) : 21-2  
 The growth of the fish-meal industry
- Hamuro, C.** (1962) M  
8-01284  
*Tech. Rep. Fish. Boat*, 16 (1) : 50 p.  
 (The new type of otter trawl fishing gears and its instruments in towing).  
*Ni En*  
 New type gears used by No. 50 'Akebono-Marui' in Bering Sea for cod and "bottan prawn".
- Hallgrímsson, I.** (1961) M  
8-01285  
*Aegir*, unpag. Repr., 3 p.  
 (On the deep-sea prawn in Icelandic waters). *Is En*  
 Fishery started in 1934 and has hitherto only been carried out in the fjords of northwest Iceland. Summer cruise for finding new fishing banks was carried out by the Fishery Research Institute in Reykjavik. Chart ill. trawling stations. Prawn catches were poor but some areas believed to be promising. New cruise is planned off the southwest and western coasts, and some areas of northern coast will be further investigated. Issued also as: *Repr. Atvinn. Háskól. Fiskid.*, (34).
- Anderson, I. G. & G. A. D. Haslewood** (1962) M  
8-01286  
*Biochem. J.*, 85 (1) : 236-42  
 Comparative studies of "bile salts"—15. The natural occurrence and preparation of allocholic acid  
 Ci 1939 Ohta, K. Chemical analysis of compounds first obtained from "Gigi" fish by Ohta.

- Wittenberg, J. B., J. M. Noronha & M. Silverman (1962)** M  
8-01287  
*Biochem. J.*, 85 (1) : 9-15

Folic acid derivatives in the gas gland of *Physalia physalis* L.

A general procedure presented for determination of several forms of folates present in tissue. Portions of acetone-dried tissue are extracted. Extracts are fractionated on diethylaminoethylcellulose columns and fractions obtained examined for ability to support growth of two microorganisms. Nature of folates originally present is deduced. Folates occurring in gas glands of *P. physalis* L., from Miami beaches, shown to be primarily N<sup>10</sup>-formyl derivatives of tetrahydrofolic acid and of tetrahydropteroyltriglutamic acid, and of an uncharacterized polyglutamyl derivative of folic acid.

- Shearer, L. W., D. E. Ritchie, Jr., & C. M. Frisbie (1962)** MF  
8-01288  
*Chesapeake Sci.*, 3 (1) : 1-17

Sport fishing survey in 1960 of the lower Patuxent Estuary and the 1958 year-class of striped bass

Interview-count creel survey conducted from July through November in 12-square mile area around Solomons, Maryland, where the Patuxent River joins Chesapeake Bay. Fishermen trolling for striped bass and bluefish and still-fishing for spot, white perch, Atlantic croakers, etc., were interviewed.

- Mansueti, R. J. (1962)** MF  
8-01289  
*Chesapeake Sci.*, 3 (1) : 52-3

National survey of fishing and hunting 1960—The second nationwide economic survey of sport fishing and hunting in the United States

Re 62-03214.

- FAO Regional Conference for Asia and the Far East,  
6th, Kuala Lumpur, Malaya, 15-29 Sept. 1962 (1962)** MF  
8-01290  
 Rome, FAO, mimeo, 5 p.

Organization of fishery research in relation to development

Do 61-232me.

- Holmes, H. B. & M. C. Bell (1960)\*** MF  
8-01291  
 Portland, Ore., 126 p.

A study of the upstream passage of anadromous fish at Willamette Falls, with recommendations for improvements in fish-passage facilities

- Kanda, K., A. Koide & M. Ogura (Anon. Transl.) (1961)\*** MF  
8-01292  
 Terminal Is., Calif., U.S. Bureau of Commercial Fish., Transl. Ser.-No. 1-3  
 The study on the color of the fishing net—1-3

En 583390, 583391 and 583393.

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**Miller, M. E. (1962)**

MF  
8-01293

Thesis, Boston University Graduate School, 415 p.

The Delaware oyster industry, past and present

DA 23 (4) : 1334. Investigation to present an accurate historical record of industry, to discover how changes in the industry over the years have affected those who were a part of it and to forecast what may lie ahead for it. Developments elsewhere along the Atlantic seaboard, and especially within the Delaware River estuary have affected the Delaware oyster industry, and are therefore considered.

**INPFC (1961)**

MF  
8-01294

*Statist. Yearb. Int. N. Pacif. Fish. Comm.*, 1961 : 57 p.

Gives tables and explanatory notes for catches by Canada, Japan and U.S.A. (incl. Alaska) of *Oncorhynchus* spp., *Clupea pallasii*, *Hippoglossus stenolepis* and *Paralithodes camtschatica* by type of boat and gear, season and area within N. Pacific. Some tables also for persons engaged, ships operating, etc.

**Miles, C. (1962)**

MF  
8-01295

*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 39-44

Development and control in fisheries

Do 60-002me.

**Villadolid, D. V. & J. Marques (1962)**

MF  
8-01296

*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 45-8

The principal fisheries development projects of the Philippines

Do 60-002me.

**Qureshi, M. R. (1962)**

MF  
8-01297

*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 59-62

Fisheries in Pakistan

Do 60-002me.

**Oka, N. (1962)**

MF  
8-01298

*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 63-8

Development of Japanese fisheries

Do 60-002me.

**Mitra, G. N. (1962)**

MF  
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*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 69-70

Observations on the development of fisheries in Orissa

Do 60-002me.



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**Anderson, A. W.** (1962) MF  
8-01300  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 95-104  
Federal assistance in the marketing of fishery products in the United States  
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**MacArthur, I. S.** (1962) MF  
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Methods of assessing progress in national fisheries development programmes  
Do 60-002me.

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*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 109  
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Do 60-002me.

**Setter, C. G.** (1962) MF  
8-01303  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 110-20  
Fisheries statistics in Australia  
Do 60-002me.

**Kong, S. M.** (1962) MF  
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*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 121-4  
The place of fisheries education and training in national fisheries development programmes in the Indo-Pacific region  
Do 60-002me.

**Anon** (1962) MF  
8-01305  
*Landb. Wereldnieuws*, 17 (20) : 311-3  
De Braziliaanse visserijsituatie (The Brazil fishery situation). *Ne*

TA 17 (8) j2160. Description of the fishery industry in Brazil. Plan for developing fishery in the north-east.

**Tysser, H. F.** (Ed.) (1962) MF  
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**Power, E. A.** (1962) MF  
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 Sistemas de pesca da ria de Aveiro (Fishing gears of the Ria de Aveiro).  
 Pr

First part of a monograph describing the gears and fishing operations in one of the most important fishing areas of north Portugal. Contains notes on equipment and materials used, costs, seasonal and environmental conditions under which gears are used, spp. caught, yields, crew and payment of services.

- Filmstrip. National Film Board of Canada** (1961) MF  
 Stanley Bowmar Co., Valhalla, N.Y. 8-01309  
 How to buy fish  
 Colour.

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*Proc. Pacif. Sci. Congr.*, 9 (10) : 5-7 8-01310  
 A review on fisheries activities in Thailand for the period 1954 to 1957

- Pennock, J. F. et al.** (1962) MF  
*Biochem. J.*, 84 : 637-40 8-01311  
 Quinones and related compounds in fish tissues

Hearts, livers, and white flesh of *Gadus callarias* were obtained from the Torry Research Station; hearts from *Esox lucius*, *Petromyzon marinus*, *P. fluviatilis*, *Anguilla anguilla* and *Salvelinus alpinus*, were made available by Freshwater Research Station, Windermere. No marked differences between lipids of marine spp.—cod and marine lamprey—, freshwater spp.—char and pike—, and anadromous spp.—eel and river lamprey—could be found. Batch of cod heart yielded sufficient ubiquinone to allow its purification by crystallization.

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 London, Duckworth, 240 p. 8-01312  
 The economics of white fish distribution in Great Britain

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*Nature, Lond.*, 194 (4823) : 52-3 8-01313  
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 Analysis of the organization and research programme of an inland fisheries administration

Do 60-002me.

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*Biochem. J.*, 84 : 536-41  
 L-threonine ethanolamine phosphate: a compound newly isolated from fish  
 Describes isolation, identification and chemical synthesis. 2 spp. were used for experiments: Australian lungfish, *Neoceratodus*, collected in north Queensland, and rainbow trout, *Salmo irideus*, obtained from the New South Wales State hatcheries at Jindabyne.
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 Effectiveness of sorbistat on the storage and keeping quality of dried fishery products  
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*Proc. Indo-Pacif. Fish. Coun.*, 9 (2) : 102-4  
 Effectiveness of biostat (osytetracycline hydrochloride) in maintaining the freshness of "hasa-hasa" (*Rastrelliger brachysomus*, Bleeker)  
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A new method for refining shark liver oil on a commercial scale and recovery of vitamin "A" by partial saponification for production of standard quality as well as higher vitamin "A" potency oil

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The role of the technological laboratory in the rapid development of the fish processing industry in India

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*Mondo sommerso*, 4 (8)

Atlante dei pesci delle coste italiane (Fish atlas of the Italian coasts)

Detachable cards, ill., with notes on morphology, reproduction, nutrition and geographical distribution of *Torpedo marmorata*, *Raja oxyrhynchus*, *Trachurus mediterraneus*, and *Xiphias gladius*.

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*Science*, 136 (3515) : 580  
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- Wood, J. L. & J. D. Andrews (1962)** 8-01330  
*Science*, 136 (3517) : 710-1  
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*Chesapeake Sci.*, 3 (1) : 47-9  
 The Atlantic bonito, *Sarda sarda*, in northern Chesapeake Bay, and comments on the seaside fishery of Maryland  
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*Chesapeake Sci.*, 3 (1) : 51  
 Salt-water fishes for the home aquarium  
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- Butz, G. & R. J. Mansueti (1962)** 8-01335  
*Chesapeake Sci.*, 3 (2) : 130-5  
 First record of the king mackerel, *Scomberomorus cavalla*, in northern Chesapeake Bay, Maryland  
 Three, each weighing about 27 pounds and about 44 inches fork length, were taken in pound nets during Oct. 1961 off Swan Point, Kent County. Meristic and morphometric data compared with specimens from other points along range. Data is given on the king mackerel fishery in southern Chesapeake Bay, Virginia, and records of the cero, *S. regalis*, are discussed.



- Cheng, S.-C. & H. Waelsch** (1962) M  
8-01336  
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- Demir, N.** (1963) M  
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*FAO Fish. Synops.*, (26) : 41 p.  
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*Notas Cent. Biol. pisc.*, Lisboa, (28) : 86 p.  
 Peixes do arquipélago de Cabo Verde (Fishes from the Cape Verde Islands)  
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- Sjöblom, V.** (1961) M  
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*Ann. zool. Soc. Vanamo*, 23 (1) : 193 p.  
 Wanderungen des Strömlings (*Clupea harengus*) in einigen schären- und Hochseegebieten der nördlichen Ostsee (Migrations of the herring, *Clupea harengus*, in some coastal and open sea areas of the northern Baltic). En

Occurrence in some archipelagos and open sea areas of the northern Baltic is described on the basis of catch statistics, fish samples, echo-soundings and tagging. Observations have been used to describe and analyze the seasonal coastward and vertical migrations.

- Clem, L. W., L. Moswus & M. M. Sigel** (1961) M  
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 Studies with cells from marine fish in tissue culture

Ci 59-8273. Tissues from *Haemulon flavolineatum* were used. Also *Pomacanthus* sp., *Calamus* sp., *Anisotremus virginicus*, *Lutjanus* sp., and *Diplectrum formosum*, all trapped in Atlantic Ocean or in Biscayne Bay near Miami, Fla. All fish were sexually mature.

- Lindberg, G. U.** (Penny, L., Transl.) (1962) M  
8-01341  
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En 59-1282UL. Available from the Ichthyological Laboratory, Bureau of Commercial Fisheries, USFWS, Washington, D.C.



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*En* 60-7435. Available from the Ichthyological Laboratory, Bureau of Commercial Fisheries, USFWS, Washington, D.C. Material collected on first cruise of 'Ob', 1955-56. Data tabulated and analysed for 37 spp. from families.

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Observations on *Holorhinus*, *Platyrrhineidis*, *Rhinobatus*, *Mustelus*, *Urobatis*, *Gymnura* and *Raia* spp. from off California.

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*J. Sci. Hiroshima Univ. (A-2)*, 25 : 337-45  
Trace elements in "magaki" [oysters] (*Ostrea gigas*)—1. Seasonal variation in meat

JSFA 13 (7) : ii-35. Seasonal variation of, and effects of different methods of cultivation on, the Cu, Fe, Mn, Zn, Pb, and Al contents of oysters were studied over a 16-month period.

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*Not. nat. Acad. Philad.*, (346) : 7 p.  
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*Bull. Mus. comp. Zool. Harv.*, 125 (9) : 247-94  
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Materials for a revision of *Serranus* and related fish genera
- SFA 7 (2) 4854. Fishes of nominal genera, *Serranus*, *Serranellus*, *Paracentropristes*, *Mentiperca* and *Prionodes* reviewed. Treatment comprehensive western North Atlantic spp., two of which are described as new, only type spp. of various genera are considered from other regions. Discussion of habits, habitat and other features. Synonymies for western Atlantic spp. and photographs, and key. Monotypic genus *Schultzea* and new Atlantic sp. of *Plectranthias* discussed.
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*Bol. Mus. nac. Chile*, 27 (3) : 171-201  
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*An. Mus. Hist. nat. Montevideo*, Ser. 2, 7 (2) : 27 p.

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*En* 59-2464UL, 59-2894UL, and 60-7221. Edited by B. B. Collette. Available from the Ichthyological Laboratory, Bureau of Commercial Fisheries, USFWS, Wash., D.C.

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*Proc. Indo-Pacif. Fish. Coun.*, 9 (2) : 37-48

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*Proc. Indo-Pacif. Fish. Coun.*, 9 (2) : 49-54

*Rastrelliger* tagging in Thailand

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**Soesanto, V. (1962)**

*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 71-8

Some problems of fisheries research with special reference to the *Rastrelliger* fishery

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8-01364*Proc. Soc. exp. Biol., N.Y.*, 109 (2) : 405-8

Glucose transport by the intestinal mucosa of the dogfish

Used simple preparation of intestinal mucosal membrane to study transport of glucose, and to show effect of temperature on transport. *Squalus acanthias* used in this study were caught in the Gulf of Maine during the months of July and August. Weighed 8-12 lb, and were kept in an enclosure in the ocean for one to four days.

**Unnithan, R. V. (1961)**M  
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On the functional morphology of a new fauna of Monogenea of fishes from Trivandrum and environs. Part 3. Heteromicrocotylidae (Microcotyloidea)

HA 31 (2) 1363. *Heteromicrocotyla vaginispina* n.sp. from the gills of *Carangoides malabaricus* differs from *H. carangis*. *H. polyorchis* n. sp. from gills of *C. malabaricus*. *Dicotyle vellavoli* n. sp. from the gills of *Chondroplites chinensis* differs from *D. stromatea*, a gill monogenean of *Stromateus cinereus*. *HETERAPTA heterapta* n.g., n. sp., from gills of *Chorinemus sanctipetri* is provisionally placed in the Heteromicrocotylinae. Some Monogenea from a "ribbon fish" caught off Suva Island are briefly described as *M. microcotyla* n. comb.

**Corkum, K. C. (1961)**M  
8-01366*Trans. Amer. micr. Soc.*, 80 (4) : 435*Phyllodistomum trinectes* Corkum; additional note

HA 31 (2) 1373. Brief note on host, habitat and disposition of the holotype of *P. trinectes* a parasite of *Trinectes maculatus* at Barataria Bay, Louisiana, USA, which was omitted from the diagnosis of Corkum's original description of the worm.

**Mironova, N. V. (U.K. MAFF, Transl.) (1961)**M  
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Lowestoft, Fish. Lab., mimeo, 71 p.

The feeding and growth of young gadoid fishes in the coastal zone of the eastern Murman

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Observed in the liver of a cod caught in Greenland.



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Metodika izucheniia dvigatel'no-oboronitel'nykh uslovykh reflektov u ryb s uchëtom velichiny dvigatel'nykh uslovykh reaktsii (Methods for studying conditioned motor-defensive reflexes in fish with record of magnitude of conditioned motor reactions)

PA 36 (1) : 66. Method and apparatus described for exact registration of latent period of conditioned reaction and magnitude of activity during period of isolated action of the conditioned stimulus.

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Washington, D.C., 9 p.

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*En* 8-01370. Description of new genus and sp. presented, based on specimens taken by the 'Isaacs-Kidd' midwater trawl from off Wilkes Land, near Peter I Isle, and in Drake Strait. Available from the Office of Technical Services, Washington, D.C.

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Detailed account of studies on the taxonomy and biology of *Sarda chilensis* and *S. velox*, based on observations in Chilean waters.

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*Proc. Pacif. Sci. Congr.*, 9 (10) : 16-7

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Symposium on biology of aquatic animal life in the tropics with special reference to the Indo-Pacific area.

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*Proc. Pacif. Sci. Congr.*, 9 (10) : 37-9

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*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 311 p.

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*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 7-8

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*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 214-5  
 Distribution of *Sebastes viviparus* and other *Sebastes* fry with ventral caudal melanophores  
 CR 61-11980. Ad 8-01412.
- M  
8-01414
- Henderson, G. T. D.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 216-9  
 Continuous plankton records: the distribution of young stages of *Sebastes*  
 CR 61-11981.
- M  
8-01415
- Kelly, G. F. & A. M. Barker** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 220-33  
 Vertical distribution of young redfish in the Gulf of Maine  
 CR 61-11982.
- M  
8-01416
- Tåning, A. V.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 234-40  
 Larval and postlarval stages of *Sebastes* species and *Helicolenus dactylopterus*  
 CR 61-11983.
- M  
8-01417
- Templeman, W. & E. J. Sandeman** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 241  
 Variations in caudal pigmentation in late-stage pre-extrusion larvae from *marinus*- and *mentella*-type female redfish from the Newfoundland area  
 Ab 61-05675.

- M  
8-01418
- Wiborg, K. F.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 241  
 Investigations on eggs and larvae of commercial fishes in Norwegian coastal and offshore waters in 1957-1958  
 Ab 61-06041.
- M  
8-01419
- Magnússon, J.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 242  
 Sex and maturity—Sex and maturity in relation to distribution and migration  
 CR 61-11984.
- M  
6-01420
- Krefft, G.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 243-4  
 A contribution to the reproductive biology of *Helicolenus dactylopterus* (De la Roche, 1809) with remarks on the evolution of the Sebastinae  
 CR 61-11985.
- M  
8-01421
- Sorokin, V. P.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 245-50  
 The redfish; gametogenesis and migrations of the *Sebastes marinus* (L.) and *Sebastes mentella* Travin  
 CR 61-11986.
- M  
8-01422
- Magnússon, J.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 251-2  
 Sex ratio of catches of redfish and migration  
 CR 61-11987.
- M  
8-01423
- Rollefsen, G.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 253  
 Age and growth  
 CR 61-11988.
- M  
8-01424
- Gulland, J. A.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 254-7  
 A note on the population dynamics of the redfish, with special reference to the problem of age determination  
 CR 61-11989.

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8-01425
- Hansen, P. M.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 258-61  
 Studies on the growth of the redfish (*Sebastes marinus*) in Godthåb Fjord, Greenland  
 CR 61-11990.
- M  
8-01426
- Kelly, G. F. & R. S. Wolf** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 262  
 Age and growth of the redfish (*Sebastes marinus*) in the Gulf of Maine  
 Ab 60-7880.
- M  
8-01427
- Kelly, G. F. & A. M. Barker** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 263-75  
 CR 61-11991.
- M  
8-01428
- Sandeman, E. J.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 276-84  
 A contribution to the problem of the age determination and growth-rate in *Sebastes*  
 CR 61-11992.
- M  
8-01429
- Surkova, E. I.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 285-90  
 Redfish, growth and age  
 CR 61-11993.
- M  
8-01430
- Trout, G. C.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 291-6  
 The growth of immature *Sebastes viviparus* (Krøyer) from the north Norwegian coast  
 CR 61-11994.
- M  
8-01431
- Trout, G. C.** (1961)  
*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 297-9  
 The otolith of group-O *Sebastes mentella* Travin  
 CR 61-11995.
- M  
8-01432
- Lamont, J. M.** (1962)  
*Scot. Fish. Bull.*, (17) : 23-4  
 Bisexual or hermaphrodite white-fish

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**Allen, J. F. (1962)\***

M  
8-01433

*Nautilus*, 75 : 149-56

Gonad development and spawning of *Brachidontes recurvus* in Chesapeake Bay

**Simpson, A. C. (1961)**

M  
8-01434

*Fish. Invest., Lond.*, Ser. 2, 23 (7) : 28 p.

A contribution of the bionomics of the lobster (*Homarus vulgaris* Edw.) on the coast of north Wales

Body measurements, growth, time of laying and hatching eggs, time of moulting, size at first maturity, movements, tagging, distribution of fishing, mortalities.

**Burd, A. C. (1962)**

M  
8-01435

*Fish. Invest., Lond.*, Ser. 2, 23 (5) : 1-42

Growth and recruitment in the herring of the southern North Sea.

**Cushing, D. H. (1962)**

M  
8-01436

*Fish. Invest., Lond.*, Ser. 2, 23 (5) : 43-71

Recruitment to the North Sea herring stocks

**Whitehead, P. J. P. (1962)**

M  
8-01437

*Nature, Lond.*, 195 (4840) : 511-2

Abdominal scutes in the round herrings (Dussumieriidae)

Taxonomically significant factors found in revision of the family. Comparative, ill. description, special reference to *Spratelloides* and *Gilchristella*.

**Harrison, R. J. (1962)**

MF  
8-01438

*New Scient.*, 14 (286) : 274-6

Seals as divers

General article on the anatomical and physiological adaptations of these mammals to underwater swimming.

**Wittenberg, J. B. & B. A. Wittenberg (1962)**

MG  
8-01439

*Nature, Lond.*, 194 (4823) : 106-7

Active secretion of oxygen into the eye of fish

Review of such observations, starting with Biot, M., 1807. Tabulates observations of O<sub>2</sub>-tension in 18 spp. of marine fishes from NW Atlantic.



MG  
8-01440

**Wilimovsky, N. J.** (1961)  
*Proc. Alask. sci. Conf.*, (11) : 93-9

An application of radioactive isotopes in fish tagging

Research and development program designed to perfect a better tag detecting system resulted in the design of a radioactive magnetic tag, tag injection equipment, and associated detection and ejection machinery. Technique is currently undergoing field evaluation in southeastern Alaska on *Clupea harengus pallasii*.

MF  
8-01441

**Pacheco, A. L.** (1962)  
*Chesapeake Sci.*, 3 (1) : 18-28

Age and growth of spot in lower Chesapeake Bay, with notes on distribution and abundance of juveniles in the York River system

Length-frequency distribution and scale samples of *Leiostomus xanthurus*, were examined from 1955-58 pound-net catches. Scale method of age determination was validated. Exploratory trawl data for 1956-58 indicated seasonal distribution and annual variations in abundance.

MF  
8-01442

**Huizinga, H. W. & J. Haley** (1962)  
*Chesapeake Sci.*, 3 (1) : 35-42

Occurrence of the acanthocephalan parasite *Telosentis tenuicornis*, in the spot, *Leiostomus xanthurus*, in Chesapeake Bay

Host-parasite relationship studied during summers of 1959 and 1960.

MF  
8-01443

**Grant, G. C.** (1962)  
*Chesapeake Sci.*, 3 (1) : 45-7

Predation of bluefish on young Atlantic menhaden in Indian River, Delaware

Stomach contents of 262 *Pomatomus saltatrix* examined to determine whether sp. is predatory on *Brevoortia tyrannus*.

MF  
8-01444

**Mansueti, R. J.** (1962)  
*Chesapeake Sci.*, 3 (2) : 137-9

Distribution of small, newly metamorphosed sea lampreys, *Petromyzon marinus*, and their parasitism on menhaden, *Brevoortia tyrannus*, in mid-Chesapeake Bay during winter months

Several examples observed from the channel at a depth of about 70 feet in Chesapeake Bay, Maryland. Snagged incidentally for gillnetting operations for striped bass.

MF  
8-01445

**Mansueti, R.** (1962)  
*Chesapeake Sci.*, 3 (1) : 56-8

Experimental ecology of the feeding of fishes

Re 61-10823.

**Mansueti, R.** (1962)

MF

*Chesapeake Sci.*, 3 (1) : 56-8

8-01446

Rate of metabolism and food requirements of fishes

Re 61-06950.

**Meyers, C. D. & R. J. Muncy** (1962)

MF

*Chesapeake Sci.*, 3 (2) : 125-8

8-01447

Summer food and growth of chain pickerel, *Esox niger*, in brackish waters of the Severn River, Maryland

Food habits and time of feeding determined for 220 collected from a tributary of Chesapeake Bay in five 24-hour sampling periods during June, July and August, 1958. Differences in stomach contents were noted between fish less than 80 mm standard length and fish greater than this length.

**Mansueti, R. J.** (1962)

MF

*Chesapeake Sci.*, 3 (2) : 135-7

8-01448

A 20-inch striped mullet, *Mugil cephalus*, with two anal spines taken in winter from Chesapeake Bay, Maryland

Unusually large but slender female taken from a depth of 80 feet in a drift gillnet in the main estuarine channel off Calvert County, in December, 1961.

**Nigrelli, R. F.** (1962)

MF

*Deep-Sea Res.*, 9 : 80

8-01449

Parasitology of fishes

Re 61-08374.

**Kerkut, G. A. & S. Krishnaswamy** (1960)

MF

*Comp. Biochem. Physiol.*, 1 (4) : 293-301

8-01450

Electrical potentials in the Isopoda (Crustacea)

Series of large regular potentials that sound as a loud "crump" over the loud-speaker found in all the isopods so far studied: *Porcellio*, *Armadillidium*, *Oniscus*, *Ligia*, *Naesa* and *Idotea*.

**Barber, A. A. & P. Sheeler** (1961)

MF

*Comp. Biochem. Physiol.*, 2 (4) : 233-40

8-01451

Iron binding by vertebrate blood sera

Specific iron-binding components were demonstrated in rat, and fish sera by using starch gel electrophoresis and radioactive iron. Experiments with *Seriola*.

# AQUATIC STOCKS

**Macey, P. T.** (Comp.) (1961) MF  
Unpag., 24 p. 8-01452

Pacific salmon literature: a preliminary list of English translations

Available translations are listed of papers, mainly Russian and Japanese, written between 1916 and 1960, alphabetical by author. Cataloging incl. title of paper in English, title (transliterated if necessary), descriptive notes, date of translation, translation note—name of journal in which article originally appeared, or other information telling what was translated—and order information. List of translations in process is also incl.

**Dawes, B.** (1962) MF  
*Nature, Lond.*, 194 (4823) : 55-6 8-01453

The monogenetic trematodes: a Russian view

Re 62-04446.

**Crisp, D. J.** (1962) MF  
*Nature, Lond.*, 194 (4833) : 1028-9 8-01454

Grazing in terrestrial, freshwater and marine environments

No 61-324me. Contains informations on the principal contributions presented.

**Janzen, D. H.** (1961) MF  
*In* 8-01557 : 61-8 8-01455

Problems with fish and pesticides in the United States

Do 60-145me. A review of situation.

**Jones, J. W. & H. Evans** (1962) MF  
*Proc. zool. Soc. Lond.*, 138 (4) : 499-515 8-01456

Salmon rearing in mountain tarns—A preliminary report.

**Yang, W. T. & U. B. Kim** (1962) MF  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (2) : 62-70 8-01457

A preliminary report on the artificial culture of gray mullet in Korea

Do 60-002me.

**Gunning, G. E. & C. R. Shoop** (1962) MF  
*Tulane Stud. Zool.*, 9 (5) : 265-72 8-01458

Restricted movements of the American eel, *Anguilla rostrata* (LeSueur), in freshwater streams, with comments on growth rate

Movement studied in two headwater streams in Louisiana. Eels were marked using metal tags or by fin-clipping. Short-term experiments in Talisheek Creek yielded home range estimates. Long-term observations limited. Growth data based on observation of marked eels showed that growth is quite irregular, a fact well-established for the European eel.

**Tinkle, D. W. (1962)**MF  
8-01459*Tulane Stud. Zool.*, 9 (5) : 331-49

Variation in shell morphology of North American turtles.—1. The carapacial seam arrangements

Position of contacts between the interlateral seams and the marginal laminae were examined in approximately 4000 specimens of 33 spp. in an attempt to determine the degree of variability and to discover if this character could be used as a taxonomic character at several levels. Geographic variation demonstrated in several of contacts, but mostly non-clinal. Data are presented on ontogenetic variation and on population comparative variation for spp. for which large samples were available.

**Bao-Khua, U. (1961)**MF  
8-01460*Vestn. leningr. Univ. (biol.)*, 16 (21) : 62-72(Change in the parasite fauna of fish in the Neva inlet during the last twenty-five years). *Ru En*

HA 31 (2) 1013. Parasite fauna of 206 fishes belonging to 12 spp. studied during 1958 and 1959; the locality was the same as that studied by Dogel & Petrushevski during 1930 and 1933. Considerable decrease in incidence of *Diphyllbothrium latum* plerocercoids attributed to improved sanitary conditions of populated areas near coast.

**Ginetsinskaya, T. A. & G. A. Shtein (1961)**MF  
8-01461*Vestn. leningr. Univ. (biol.)*, 16 (15) : 60-72(Characteristics of the parasitic fauna of invertebrates and the application of basic rules of ecological parasitology to these infections). *Ru*

HA 31 (2) 1331. Authors have shown, restricting themselves to aquatic invertebrates, that the basic rules of ecological parasitology—as worked out by Dogel in 1947 for vertebrates—are also applicable to the parasite fauna of invertebrates.

**Krotas, R. A. (1959)**MF  
8-01462*Trud. Akad. Nauk litovsk. SSR*, (18) : 173-6(Cucullanus dogieli n.sp., a parasite of cyprinid fish). *Ru Li*

HA 31 (2) 1445. Described and figured; found in *Rutilus rutilus*, *Leuciscus leuciscus*, *L. cephalus*, *L. idus*, *Barbus barbus*, *Alburnus alburnus*, *Alburnoides bipunctatus*, *Blicca bjoerkna* and *Vimba vimba* from the Zapadnaya Dvina, Neman, Dniester, Danube and Don. Differentiated from *C. cyprini*, only other sp. of this genus parasitic in cyprinids. New sp. is also differentiated from *C. cirratus*, *C. heterochrous* and *C. incertus* from marine life.

**Shcherbina, A. K. (1960)**MF  
8-01463

Kiev, 334 p.

(Diseases of fish and their control). *Ru*

HA 31 (2) 1490.



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- MF  
8-01464
- Clements-Merlini, M.** (1962)  
*Gen. comp. Endocr.*, 2 (4) : 354-68  
 Altered metabolism of  $I_{131}$  by the endostyle and notochord of ammocoetes larvae.—1. Effects of treatment with thyrotropic stimulating hormone

Experiments with larvae of *Petromyzon marinus*.

- MF  
8-01465
- Clements-Merlini, M.** (1962)  
*Gen. comp. Endocr.*, 2 (4) : 361-8  
 Altered metabolism of  $I_{131}$  by the endostyle and notochord of ammocoetes larvae.—2. Effects of treatment with thiourea or potassium thiocyanate

Co 8-01464. Experiments with larvae of *Petromyzon marinus*.

- MF  
8-01466
- Anon.** (1962)  
*Fish. Yearb. Direct.*, 1962 : 110-4  
 Dictionary of fish names

- MF  
8-01467
- Horner, J. L., N. Longo & M. E. Bitterman** (1961)  
*Amer. J. Psychol.*, 74 : 114-20  
 A shuttle box for fish and a control circuit of general applicability

PA 36 (1) : 58.

- MF  
8-01468
- Lindsey, C. C.** (1961)  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 54-8  
 The bearing of experimental meristic studies on racial analyses of fish populations

Symposium on new or little explored aspects of fishery research.

- MF  
8-01469
- Neave, F.** (1961)  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 59-62  
 Pacific salmon: ocean stocks and fishery developments

Symposium on new or little explored aspects of fishery research.

- MF  
8-01470
- Villadolid, D. V.** (1961)  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 88  
 Possible improvement of Philippine commercial fish ponds as indicated by the food habits of fry and fingerlings of the milkfish, *Chanos chanos* Forskal

Abstr. only. Symposium on the improvement and management of natural inland waters and impounds waters.

MF  
8-01471**Moss, M. L.** (1961)*Acta anat.*, 46 (4) : 343-62

Studies of the acellular bone of teleost fish. 1. Morphological and systematic variations.

136 spp. of 71 families of teleosts studied—mainly from the Lerner Marine Laboratory at Bimini, Bahamas—generally the lower orders have cellular type of bone whereas the higher orders have developed an acellular type—usually uniform throughout the skeleton.

MF  
8-01472**Key, D.** (1962)*Nature, Lond.*, 195 (4841) : 620

Abnormal breeding behaviour in the oyster

Observations of *Ostrea edulis* in River Crouch, Essex, UK, 27 Nov.–2 Dec. 1961, in “black sick” condition.

MF  
8-01473**Sokolov, W.** (1962)*Nature, Lond.*, 195 (4840) : 464-6

Adaptations of the mammalian skin to the aquatic mode of life

General review of subject with reference to spp. of cetaceans, pinnipeds, otters, beavers. Deals comparatively with structural and chemical factors.

F  
8-01474**Woolcott, W. S.** (1962)*Chesapeake Sci.*, 3 (2) : 94-113Intraspecific variation in the white perch, *Roccus americanus* (Gmelin)

Results compared with that of the striped bass, *R. saxatilis*, which occurs sympatrically over a part of the range. Counts of fin rays and scales and measurements of various body parts were made on over 1,400 specimens. The data are presented as frequency distributions. There appear to be two primary gene pools located north and south of the Delaware River.

F  
8-01475**Mackereth, J. C.** (1960)*Proc. R. ent. Soc. Lond.*, 35A : 17-23

Notes on the Trichoptera of a stony stream

Details of collection of fifteen spp., excluding the limnophilids, obtained from a moorland stream near Windermere. Incl. discussion of their life-histories and distribution of larvae.

F  
8-01476**Crisp, D. T.** (1959)*Irish Nat. J.*, 13 : 88-92

Hydracarinae and nematodes parasitizing *Corixa scotti* (D. & S.) (Hemiptera) in western Ireland

Both parasites may affect the fecundity of *C. scotti* in some water bodies.

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- F  
8-01477
- Burton, J. F.** (1960)  
*Lond. Nat.*, 39 (1959) : 17-8  
 Records of fishes from the N.W. Kent marshes  
 Notes on habitats and abundance for 10 spp.
- F  
8-01478
- McWhinnie, M. A. & P. N. Saller** (1960)  
*Comp. Biochem. Physiol.*, 1 (2) : 110-22  
 Analysis of blood sugars in the crayfish, *Orconectes virilis*  
 Effects of deprivation of eyestalks, and seasonal changes and relation to moult cycle in specimens from Wisconsin kept in aquaria.
- F  
8-01479
- Wilber, C. G.** (1960)  
*Comp. Biochem. Physiol.*, 1 (2) : 164-6  
 Cardiac responses of *Alligator mississippiensis* to diving  
 Alligators subjected to a simulated dive show a profound bradycardia. Thus respond in same way as do the seal, duck and certain snakes and lizards.
- F  
8-01480
- Edgren, R. A.** (1960)  
*Comp. Biochem. Physiol.*, 1 (3) : 213-7  
 A seasonal change in bone density in female musk turtles, *Sternotherus odoratus* (Latreille)  
 Sex differences and relation to breeding cycle in the NE American Kinosernidae.
- F  
8-01481
- Wagner, J. A.** (1962)  
 Thesis, Michigan State University, 210 p.  
 Gross and microscopic anatomy of the digestive and urinary systems and histology of the reproductive system of the nutria, *Myocastor coypus bonariensis* (Geoffroy)
- F  
8-01482
- Jackson, P. B. N.** (1961)\*  
 Lusaka, Govt Print., 140 p.  
 The fishes of Northern Rhodesia; a check list of indigenous species
- F  
8-01483
- Chamberland, E.** (1961)\*  
 La Pocatière, France, 13 p.  
 L'efficacité de la production de la truite on pisciculture (The efficiency of production in trout culture)

**Bailey, R. M. & M. O. Allum** (1962)\*

F  
8-01484

*Misc. Publ. Mus. Zool. Univ. Mich.*, (119) : 131 p.

Fishes of South Dakota

Identifies published records, presents keys for identification. Records original distributional data based on 137 collections throughout State. Solves some problems involving systematic status of certain species. Clarifies or extends information on distribution of several spp. in adjoining Plains area. Determines geographic sources of origin of South Dakota fishes and interprets routes of postglacial dispersal.

**Gordon, I.** (1962)

F  
8-01485

*Nature, Lond.*, 194 (4823) : 50-1

A classification of living animals

Re 62-00968.

**Alabaster, J. S. & R. L. Welcomme** (1962)

F  
8-01486

*Nature, Lond.*, 194 (4823) : 107

Effect of concentration of dissolved oxygen on survival of trout and roach in lethal temperatures

Aquarium experiments with *Salmo gairdnerii* and *Rutilus rutilus*.

**Wickler, W.** (1962)

F  
8-01487

*Nature, Lond.*, 194 (4833) : 1092-3

"Egg-dummies" as natural releasers in mouth-breeding cichlids

Reports observations on the fertilization of eggs in African *Haplochromis wingatii*, with interpretation of similar cases in certain spp. of *Tilapia*.

**Larsen, L. O.** (1962)

F  
8-01488

*Nature, Lond.*, 194 (4833) : 193

Weight and length in the river lamprey

Reports laboratory observations on *Lampetra fluviatilis* (L.) Gray shortening during fasting. Compares results of observations made in Sweden, Denmark and Netherlands.

**Nishkov, M. & S. Nikolov** (1960)\*

F  
8-01489

*Khidr. i Met.*, 5 (2) : 56-9

(Problems of pisciculture in connection with the development of hydro-technical construction in Bulgaria). *Bu*

**Szabo, Th.** (1962)

F  
8-01490

*Life Sci.*, (7) : 285-6

The activity of cutaneous sensory organs in *Gymnarchus niloticus*

Electrical activity recorded by placing silver/silver chloride electrodes on surface of skin of unanaesthetized fish partly raised from water.



# AQUATIC STOCKS

F  
8-01491

**Whitehead, P. J. P.** (1962)  
*Proc. zool. Soc. Lond.*, 138 (4) : 605-37  
 The relationship between *Tilapia nigra* (Günther) and *T. mossambica* Peters in the eastern rivers of Kenya

F  
8-01492

**Ahmad, N.** (1962)  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (2) : 71-2  
 Recent advances in piscicultural practices in Pakistan

Do 60-002me.

F  
8-01493

**Prowse, G. A.** (1962)  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (2) : 73-5  
 The use of fertilizers in fish culture

Do 60-002me.

F  
8-01494

**Anon.** (1961)  
*Bull. Chamb. Agric. Cameroun*, 40 : 46-9  
 Politique piscicole pour les eaux continentales de l'ouest africain  
 (Piscicultural policy for the continental waters of West Africa)

TA 17 (8) j2162. Discussion of the importance of inland fisheries and fish culture for West Africa. It is stated that the introduction of *Tilapia* has greatly stimulated interest in fish culture. More attention should be paid to the possibility of using *Heterotis niloticus* in fish culture.

F  
8-01495

**Anon.** (1962)  
 News from Hsinhua News Agency, China, 1601, p. 12  
 African fish thrives in Yangtze River province

TA 17 (8) j2161. A few years ago *Tilapia* was introduced into southern China from Viet Nam. In 1959 it was introduced in Hupeh, where the climate is too cold to keep the *Tilapia* during the winter in the open. Methods are being investigated for protecting the fish during the cold winter months. These methods are briefly indicated.

F  
8-01496

**Anon.** (1962)  
*Survey China Mainland Press*, (2686) : 23  
 Fish breeding in rice fields brings bigger crop yield

TA 17 (8) j2164. Experiments carried out in Hupeh province (China) have shown that the culture of carp spp. in irrigated rice fields is an economic proposition. The fry should be at least 2.5 cm long. A water level of 7.5 cm is sufficient, provided ditches and small pools have been dug where the fish can take shelter. Fish culture had a beneficial influence on the rice plants and hampered weed development. Fish culture in rice fields is strongly recommended.

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**Film** (d.u.)

Indiana Univ. Audio-Visual Center

Crayfish anatomy

F  
8-01497

11 min, sound, colour. One of series of teaching films, describes external features, functions of claws, swimmerettes, and broad uropods, and demonstrates dissection.

**Collette, B. B. & R. W. Yerger** (1962)

*Tulane Stud. Zool.*, 9 (4) : 213-30

The American percid fishes of the subgenus *Villora*

F  
8-01498

*Villora* Hubbs & Gannon is removed from *Hololepis* Putnam where placed by some authors. Variation in number of meristic characters between populations of *Etheostoma* (*Villora*) *edwini* (Hubbs & Gannon) is considered. *E. okaloosae* (Fowler) is resurrected from the synonymy of *E. swaini* (Jordan).

**Collette, B. B.** (1962)

*Tulane Stud. Zool.*, 9 (4) : 115-211

The swamp darters of the subgenus *Hololepis*

F  
8-01499

Subgenus *Hololepis*, genus *Etheostoma*, incl. eight forms of small specialized forms. *E. edwini* replaced in subgenus *Villora* Hubbs & Gannon.

**Hobbs, H. H., Jr.** (1962)

*Tulane Stud. Zool.*, 9 (5) : 273-93

Notes on the affinities of the members of the Blandingii Section of the crayfish genus *Procambarus* (Decapoda, Astacidae)

F  
8-01500

Discussion of hypothetical procambarid ancestor followed by summary of the composition of the genus *Procambarus*, composed of 108 spp. and sub-spp. grouped into ten sections. Key is provided for the assignment of crayfishes to the sections, and an additional one for the seven groups of the Blandingii Section which comprises 55 spp. and sub-spp. Diagnosis, provided for each group, precedes list of spp., the range and habits of each, and a discussion of relationships within the group. First pleopods of representative first-form males of each sp. are ill.

**Sogandares-Bernal, F.** (1962)

*Tulane Stud. Zool.*, 9 (5) : 319-22

*Microphallus progeneticus*, a new apharyngeate progenetic trematode (Microphallidae) from the dwarf crayfish, *Cambarellus puer*, in Louisiana

F  
8-01501

The following astacid decapods from Louisiana were examined and found uninfected with *M. progeneticus*: *Cambarellus shufeldti* (Faxon, 1884); *Orconectes clypeatus* (Hay, 1899); *O. lancifer*, (Hagen, 1870); *Procambarus blandingi acutus* (Girard, 1852); *P. clarki* (Girard, 1852); and *P. penni* (Hobbs, 1951). Metacercariae of *M. opacus* were found in *P. clarki* from localities in which *M. progeneticus* was collected.

- Yerger, R. W. & R. D. Suttkus** (1962) F  
8-01502  
*Tulane Stud. Zool.*, 9 (5) : 323-30  
 Records of freshwater fishes in Florida

Extensive collections in western Florida have added 9 spp. of freshwater fishes to the faunal list of state: *Moxostoma duquesnei*, *M. carinatum*, *Hybopsis aestivalis*, *Notropis welaka*, *N. zonistius*, *N. leedsi*, *Etheostoma histrio*, *E. parvipinne*, *E. okaloosae*. Specimens of *Moxostoma* from the Apalachicola River are tentatively identified as *M. duquesnei*. Considered as synonyms for many years, both *Notropis welaka* and *Etheostoma okaloosae* are now recognized as valid spp.

- Regier, H. A.** (1962) F  
8-01503  
 Thesis, Cornell Univ., U.S., 436 p.  
 Some aspects of the ecology and management of warm-water fish in New York farm ponds

DA 22 (12) : 4445-6. Objective of study to construct factual basis for fish-stocking and management. Incl. analysis of biological data on 65 experimental fish populations of various sp. combinations; contains information on pond costs and pond-owner preferences and practices. Sp. combinations tested incl.: largemouth bass and bluegills, golden shiners, channel catfish and yellow perch. Data on survival, growth, reproduction, standing crops, harvests, and population condition were summarized. Numerous ecological interrelationships were postulated and explored.

- Schwassmann, H. O.** (1962) F  
8-01504  
 Thesis, The Univ. of Wisconsin, 263 p.  
 Experiments on sun orientation in some freshwater fish

DA 22 (12) : 4446-7. Investigates centrarchids and cichlids. Experiments show influence of environmental factors, such as the daily light cycle, length of photoperiod, and sun's altitude. Fish were trained in circular tank to find an open box in a specific compass direction, in which they could hide. Fish were trained inside a building to swim at a certain angle to an electric light which was thought to substitute for the sun. Green sunfish and cichlids were raised from the egg stage in a light/dark cycle of artificial light. After training to the electric light indoors, these fish altered the trained angle when tested under the sun at different times of the day. Machine was designed and employed successfully to condition fish to sun movement which appeared to be reversed in direction from the clockwise movement in the northern hemisphere. Hypothetical models which serve to ill. "sun-compass" behavior are suggested and criticized. The role of the optic tectum, the dorsal midbrain, as a possible coordinating center for sun orientation is discussed. A preliminary experiment, to find evidence for a discrete projection of retinal areas on to surface of optic tectum is described.

- Gofman-Kadoshnikov, P. B. et al.** (1961) F  
8-01505  
*Med. Parazit., Moskva*, 30 (1) : 92-5  
 (*Diphyllbothrium* infection in the Moscow region). Ru En

HA 31 (2) 1015. Plerocercoids found in two of 56 perch, two of 21 ruff and in 11 of 25 pike from the Moscow canal. This is the first record of *D. latum* from this canal but human cases of infection have been observed in this area since 1951-52.



Sawyer, T. K. (1961)

F  
8-01506

*Proc. helm. Soc. Wash.*, 28 (2) : 175-6

The American otter, *Lutra canadensis vaga*, as a host for two species of trematodes previously unreported from North America

HA 31 (2) 1102. *Bashkirovitrema incrassatum* from stomach and *Enhydriodiplostomum alarioides* from small intestine reported in South Georgia. Suggests that either the subfamily Alariinae be suppressed, as first proposed by Chandler & Rausch (1946), or that new criteria be established to justify its retention.

Khamidullin, R. I. & T. E. Kostina (1960)

F  
8-01507

*Uchen. Zap. kazan. vet. Inst.*, 79 : 227-32

(Treatment of opisthorchiasis). Ru

HA 31 (2) 1140. Cyprinidae from Kama and Volga Rivers harboured *Opisthorchis felineus metacercariae*.

Baer, J. G. & A. Fain (1960)

F  
8-01508

*Acta trop.*, Basel, 17 (4) : 374-7

Observations sur le développement de *Bothriocephalus (Cleistobothrium) kivuensis* Baer & Fain 1958 (Observations on the development of *Bothriocephalus (Cleistobothrium) kivuensis* Baer & Fain 1958)

HA 31 (2) 1265. Eggs obtained from gravid proglottides of four tapeworms collected from *Barbus altianalis altianalis*. Eggs, and, in one experiment, free coracidia were placed in tubes with *Eucyclops rubescens* and both were able to establish an infection. Infected cyclops were introduced into mouths of *Tilapia* and three goldfish, but no plerocercoids were recovered.

Williams, J. B. (1961)

F  
8-01509

*J. Helminth.*, 35 (1-2) : 181-202

The dimorphism of *Polystoma integerrimum* (Frölich) Rudolphi and its bearing on relationships within the Polystomatidae—Part 3.

HA 31 (2) 1364. Results obtained from reinvestigation of *P. integerrimum*, *Protopolystoma xenopi* and *Parapolystoma bulliense* are discussed and an account given of previous controversies in the literature on *Polystoma* and related genera. Similarity in structure between *Polystoma* and the Hexabothriidae is indication of possible origin of Polystomatidae from an ancestral stock parasitic on the gills of primitive fish.

Caballero y C., E., F. Garcia-Torres & L. Flores-Barroeta (1960)

F  
8-01510

*Mem. Acad. Cienc. 'Ant. Alzate'*, 59 (1-2) : 89-96

Investigaciones sobre dermatitis esquistosómica en el Lago de Pátzcuaro, Michoacán, México. 2. *Physa mexicana* Philippi var. *tolucensis* (Mollusca) como hésped de una xifidiocercaria (Investigations on schistosome dermatitis in the lake of Pátzcuaro, Michoacán, México. 2. *Physa mexicana* Philippi var. *tolucensis* (Mollusca) a host of a xiphidiocercaria)

*Cercaria mexicana* n.sp., a xiphidiocercaria, was found in *Physa mexicana* var. *tolucensis* in Mexico. Co 9-07499.



- Damian, R. T.** (1961) F  
8-01511  
*J. Parasit.*, 47 (3) : 503-8  
*Macravestibulum kraatzii* n.sp. (Trematoda: Pronocephalidae), with revision of the genus *Macravestibulum* Mackin, 1930

HA 31 (2) 1374. Following examination of the holotypes and/or paratypes of *M. eversum*, *M. kepneri* and *M. obtusicaudum*, emends diagnosis of genus. There exist certain differences between the paratypes and Horsfall's specimens collected from experimentally infected freshwater turtles. *M. kraatzii* n.sp. is described and figured from *Pseudemys floridana* from Florida, U.S.A.

- Dollfus, R. P.** (1960) F  
8-01512  
*Ann. Parasit. hum. comp.*, 35 (5-6) : 704-12  
 Sur *Hemiurus communis* T. Odhner 1905 (Trematoda Digenea, Hemiuridae) (On *Hemiurus communis* T. Odhner 1905 (Trematoda Digenea, Hemiuridae) )

HA 31 (2) 1375. Examines 12 of Odhner's original preparations, described in 1905 but not figured, and gives line drawings. Some of Odhner's specimens were from *Salmo trutta* and *Raniceps raninus*, hosts which he did not record.

- Motwani, M. P. & C. B. Srivastava** (1961) F  
8-01513  
*Indian J. Helminth.*, 13 (2) : 93-9

On two phyllodistomes from the urinary bladder of siluroid fishes (Trematoda: Gorgoderidae)

HA 31 (2) 1391. *Phyllodistomum chauhani* n.sp. from *Mystus (Osteobargus) aor* and *M. seenghala*. *P. tripathi* n.sp. from *Bagarius bagarius*. Host-parasite list of Indian spp. of the genus *Phyllodistomum* is given.

- Spasskaya, L. P.** (1961) F  
8-01514  
*Acta vet. hung.*, 11 (3) : 311-37  
 (Cestodes of birds of Tuva—4. Hymenolepididae of aquatic birds). *Ru De*

HA 31 (2) 1416.

- Ghittino, P.** (1961) F  
8-01515  
*Riv. Parassit.*, 22 (3) : 193-204

Su una capillariosi epatica in trote di allevamento e in altri teleostei delle acque libere del bacino del Po in Piemonte, con descrizione di una nuova specie (*Capillaria eupomotis*) (Hepatic capillariosis of trout in hatchery and of other teleosts in the natural waters of the Po valley in Piedmont with the description of a new species, *Capillaria eupomotis*). *En*

HA 31 (2) 1437. Trout in hatchery in Po valley found to have ova and helminths in liver. In the same region *Phoxinus phoxinus*, *Eupomotis gibbosus*, *Leuciscus soffiua muticellus* and *L. cephalus cabeda* were found to be heavily infected. The nematode was identified as a new sp., *Capillaria eupomotis* n.sp. and is described in detail and figured.

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- F  
8-01516
- Lee, D. L.** (1961)  
*Parasitology*, 51 (1-2) : 237-40  
 Two new species of cryptobiotic (anabiotic) freshwater nematodes, *Actinolaimus hintoni* sp. nov., and *Dorylaimus keilini* sp. nov. (Dorylaimidae)  
 HA 31 (2) 1446. Described and figured. Specimens occurred in dried mud at 2,500 ft at Anara, northern Nigeria.
- F  
8-01517
- Atwood, H. L.** (1962)  
*Nature, Lond.*, 195 (4839) : 387-8  
 Depolarization and tension in crustacean muscle  
 Muscle used in these experiments was the abductor muscle of the first walking leg of *Astacus fluviatilis*.
- F  
8-01518
- Chapman, D. I.** (1962)  
*Nature, Lond.*, 195 (4839) : 401  
 Species of Siphonaptera from a British otter  
 Siphonaptera recorded from majority of British wild mammals. Notable exceptions are Cetacea; Pinnipidea; *Myotis bechsteini* Kuhl, *Myocastor coypus* Mol., and *Lutra lutra* L. On 24 Aug. 1961 a dead female *L. lutra* L. was found with a flea, a female *Spilopsyllus cuniculi* Dale.
- F  
8-01519
- Mills, A. R.** (1962)  
*New Scient.*, 15 (302) : 464-5  
 Tropical river blindness  
 In some African and Central American riverside fishing communities whole populations are infected by onchocerciasis. Treatment is effective but requires skilled doctors; control of *Simulium* which transmits the disease may be the solution.
- F  
8-01520
- Summer, W.** (1962)  
*New Scient.*, 15 (302) : 469  
 Letters—The crayfish's other eye
- F  
8-01521
- Weatherley, A. H.** (1961)  
 Thesis, Univ. of Glasgow, U.K.  
 Some effects of high temperatures on the perch *Perca fluviatilis* L., and their importance in influencing its distribution.  
 Upper lethal temperature determined experimentally in relation to acclimatization temperature. Information thus obtained combined with knowledge of distribution of spp. in nature, to determine extent to which high temperature limits its proximity to the equator. Analysis aided by knowledge of distribution of *P. flavescens* (Mitchill) of N. America. Concluded that distribution of both controlled by two principal factors. First is inability to live in streams, or sections thereof, with steep gradients. Second, high water temperature in midsummer, appears to exercise its effects in at least two extensive regions of the world.

- F  
8-01522
- Roy, B. B.** (1962)  
*Proc. nat. Inst. Sci. India.*, 28B (1) : 13-28  
Action of zinc on the hypothalamopituitary adrenal axis of the fish, Guinea pig and dog and on different experimental preparations
- Anterior interrenals and pituitaries of *Cirrhina mrigala*, *Catla catla* and *Labeo rohita* described. Control of ACTH secretion in fishes discussed and the importance of the neurosecretory system—central and caudal—stressed.
- F  
8-01523
- Fehlmann, H. A.** (1961)  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 11-3  
Notes on fish ecology in stream drainages in the Palau Islands
- Symposium on biology of aquatic animal life in the tropics with special reference to the Indo-Pacific area.
- F  
8-01524
- Brittan, M. R.** (1961)  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 18-31  
Adaptive radiation in Asiatic cyprinid fishes, and their comparison with forms from other areas
- Symposium on biology of aquatic animal life in the tropics with special reference to the Indo-Pacific area.
- F  
8-01525
- Swingle, H. S.** (1961)  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 43-5  
Some relationships within fish populations causing fluctuations in production
- Symposium on new or little explored aspects of fishery research.
- F  
8-01526
- Swingle, H. S.** (1961)  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 72-5  
Relationship of pH of pond waters to their suitability for fish culture
- Symposium on the improvement and management of natural inland waters and impounds waters.
- F  
8-01527
- Prowse, G. A.** (1961)  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 76-9  
Some scientific aspects of fish culture in ponds
- Symposium on the improvement and management of natural inland waters and impounds waters.
- F  
8-01528
- Thiemmedh, J.** (1961)  
*Proc. Pacif. Sci. Congr.*, 9 (10) : 80-3  
Notes on *Pangasius* culture
- Symposium on the improvement and management of natural inland waters and impounds waters.

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**Raul Olivier, S.** (1959)

F  
8-01529

*Agro*, 1 (2) : 94 p.

Sequias, inundaciones y aprovechamiento de las lagunas bonaerenses con especial referencia al desarrollo futuro de la piscicultura (Dryness, floods and utilization of the lagoons in the Buenos Aires area, with especial reference to the future development of fishculture)

Describes the evolution of the lagoons in relation with the physical environment and the engineering problems involved. Contains references to different methods of control of aquatic plants and analyses the prospects for fish culture, with special reference to *Austromenidia bonariensis*, *Patagonina hatcheri*, *Percichthys* sp., *Hoplias malabaricus* in the area.

**Horsfall, W. R.** (1962)

F  
8-01530

New York, Ronald Press Co., 425 p.

Medical entomology: arthropods and human disease

Incl. reference to aquatic forms.

**Machado-Cruz, J. A.** (1962)

F  
8-01531

*Publ. Inst. Zool. Nobre*, (82) : 18 p.

Sur l'apparition écente de "bacterial gill disease" en Europe et sa caractérisation histopathologique (On the recent appearance of "bacterial gill disease" in Europe and its histopathological characteristics)

Notes on an outburst in a fish pond in north Portugal. Discusses symptomatology of the disease in *Salmo irideus* and *S. trutta*. Incl. remarks on prophylactic measures.

**Maestrone, G. & M. A. Benjaminsson** (1962)

F  
8-01532

*Nature, Lond.*, 195 (4842) : 719-20

*Leptospira* infection in the gold fish (*Carassius auratus*)

Important role of waterholes, rice fields, swamps, slow-moving streams and sewers in the epidemiology of human and animal leptospirosis has been established. Ability of *Leptospira* to penetrate bodies of fish living in contaminated water has been determined in experiments reported here; course of infection in host's tissues followed.

**Ophel, I. L. & J. M. Judd** (1962)

F  
8-01533

*Nature, Lond.*, 194 (4834) : 1187-8

Absorption of radiostrontium by the gills of freshwater fish

Account of experiments carried out on *Carassius auratus*.



# AQUATIC STOCKS

F  
8-01534

**Randall, D. J. (1962)**  
*Nature, Lond.*, 195 (4840) : 506

Effect of an anaesthetic on the heart and respiration of teleost fish

Properties of Sandoz "M.S. 222" compound, a meta-amino-benzole acid ethyl ester in the form of a soluble salt have led to its widespread use in studies of fish physiology. Electrocardiogram, respiratory rate, and respiratory amplitude were recorded in tench, *Tinca tinca* L., held in a tank. Handling caused considerable rise in heart-rate. Effect of "M.S. 222" was to produce an increase in heart-rate, increase being more marked at higher concentrations.

F  
8-01535

**Matty, A. J. (1962)**  
*Nature, Lond.*, 195 (4840) : 506-7

Effects of mammalian growth hormone on *Cottus scorpius* blood

Has been shown during work on hypophysis-pancreas relations in teleost fish that mammalian growth hormone affects blood glucose, protein and urea.

FG  
8-01536

**Boyd, E. S. & L. C. Gardner (1962)**  
*Science*, 136 (3516) : 648-9

Positive and negative reinforcement from intracranial stimulation of a teleost

Tests in which animal receives or avoids direct electrical stimulation of its brain according to its position in the tank as well as tests of free operant behavior demonstrate the existence of both positively and negatively rewarding areas in brain of goldfish.

FG  
8-01537

**Scarborough, B. B. & R. G. Addison (1962)**  
*Science*, 136 (3517) : 712-3

Conditioning in fish: effects of X-irradiation

Primary purpose of study to observe effects of large single dosages of x-rays on rate of acquisition and retention of conditioned responses and to determine lethal dosage. Golden shiner minnows, *Notemigonus crysoleucas* (Mitchill), were used.

FG  
8-01538

**Fleming, W. R. & A. H. Meier (1961)**  
*Comp. Biochem. Physiol.*, 2 (1) : 1-7

The effect of mammalian parathormone on the serum calcium levels of *Fundulus kansae* and *Fundulus catenatus*

Comparative study of these 2 spp. from Ozark and Missouri.

**Holden, A. V. (1962)**FG  
8-01539*Ann. appl. Biol.*, 50 (3) : 467-77A study of the absorption of  $^{14}\text{C}$ -labelled DDT from water by fish

Distribution of DDT in brown trout poisoned by low aqueous concentrations studied. Direct-mount technique for determining carbon-14 activity extracted from various organs is described. It is suggested that concentration of DDT present in lipids may determine toxicity to fish, explaining greater susceptibility of fish in poor condition or of low fat content. Use of static water for fish toxicity tests involving insecticides is criticized.

**Gerking, S. D. (1962)**FG  
8-01540*Ecol. Monogr.*, 32 (1) : 31-78

Production and food utilization in a population of bluegill sunfish

Quantitative description and analysis of relation of *Lepomis macrochirus* to its benthos and entomostracan food supply in Wyland Lake, Indiana. Describes lake ecologically. Structure of fish populations, mortalities, growth and reproduction; food turnover of fish population; stomach analyses; benthos and plankton estimation, cropping and production efficiency; comparison of production rates with others in literature.

**Brian, P. W. (1962)**G  
8-01541*Ann. appl. Biol.*, 50 (3) : 379-88

Some reflexions on the present state of biology

Address of the President of the Association of Applied Biologists delivered to the annual general meeting on Friday, 13 Apr. 1962. Deals with population and food resources and production problem.

## MISCELLANEOUS AND AUXILIARIES

**Anon. (1962)**M  
8-01542*Deep-Sea Res.*, 9 : 83-108

Oceanographic bibliography

First issue of list of about 700 references in order of main subject headings, mostly to 1960 or 1961 publications, but some back to 1957.

**International Conference on Prevention of Pollution of the Sea by Oil (1962)**M  
8-01543

London, 98 p.

Final act of the . . .

Do 61-147me. Amends 1954 convention

**Nichols, M. (1962)\***M  
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*Nature, Lond.*, 193 (4822) : 1231-2  
 Obituaries—Dr. A. F. Bruun  
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*Phycologia*, 1 (4) : 167-9  
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*Proc. Indo-Pacif. Fish. Coun.*, 9 (3) : 22-9  
 The organization of fisheries scientific research  
 Do 60-002me.  
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 No 61-256me.  
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 The public health significance of the recent outbreaks of poisonings by  
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*Spec. Publ. int. Comm. Nthw. Atlant. Fish.*, (3) : 300.  
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8-01553

*Science*, 136 (3518): 780-1

Very small diatoms: preliminary notes and description of *Chaetoceras galvestonensis*

Several spp. and genera of diatoms isolated from Gulf of Mexico waters at Galveston. Organisms were isolated in unialgal cultures, and very rapid growth rates were observed. Environmental and experimental implications are pointed out. New sp. is described and figured.

**Silva, P. C.** (1961)

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*Phycologia*, 1 (2-3): 61-145

Phycological literature for 1959

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**Koster, J. Th.** (1961)

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An obituary of this Dutch botanist. Incl. list of her publications.

**Papenfuss, G. F.** (1961)

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*Phycologia*, 1 (4): 172-82

Nils Eberhard Svedelius: a chapter in the history of phycology

An obituary of this eminent Swedish botanist, with a brief review of scientific activity; incl. bibliography.

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Leiden, E. J. Brill, 118 p.

Symposium—The ecological effects of biological and chemical control of undesirable plants and animals. 8th Technical Meeting IUCN, Warszawa 15-24/7/60

Do 60-145me.

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*Proc. Indo-Pacif. Fish. Coun.*, 9 (3): 17-21

The establishment of a national program of fisheries research

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**Anon.** (1962)

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*Nature, Lond.*, 195 (4839): 337-8

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*Fish. Yearb. Direct.*, 1962 : 149-72  
World fishery research

**Anon. (1962)** MF  
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*Unesco Chron.*, 8 (7) : 265-6  
News of the secretariat—Food control in the Mekong Delta

With assistance of UN Special Fund, possibility of building flood-control dam on Tonle Sap is to be studied in detail. Project involves construction of mathematical model of delta with a view to determining the influence that the proposed dam would have not only on flood waters, but also on sylviculture, fisheries, navigation and power production.

**Migdalski, E. C. (1960)\*** MF  
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**Spano, A. F. (1962)\*** MF  
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U.S. Weather Bureau  
An annotated bibliography of climatic maps of Colombia

**Brazil. Conselho de Desenvolvimento da Pesca (1962)** MF  
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Mimeo  
Legislação básica da pesca brasileira (Basic laws on the Brazilian fisheries)

Compiles principal laws issued after 1939, concerning the socio-economic, administrative and management aspects of the fisheries.

**Street, P. (1961)\*** G  
8-01565  
London, Faber & Faber, Ltd., 232 p.  
Vanishing animals: preserving nature's rarities

**Kuenen, D. J. (1961)** G  
8-01566  
*In* 8-01557 : 1-9

The ecological effects of chemical and biological control of undesirable plants and insects—General introduction

Introduction to 8-01557.

**Wortley, G. (1962)** G  
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The impact of legal control of discharge of radioactive materials on the responsible departments

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*In* 8-01127 : 309-21

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Legal controls in the United States to protect the public from exposure from radioactive material

**Roberts, I. C. & S. H. Small** (1962)  
*In* 8-01127 : 322-44

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Impact of legal control of discharge of radioactive materials on the responsible departments

**Smith, L. P.** (1962)  
*Freed. Hunger Camp. bas. Stud.*, (1) : 80 p.  
 Weather and food

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A general review with only brief specific reference to fisheries and aquatic resources.

**Ferreri, C.** (1959)  
*Ann. Fac. Econ. Comm. Palermo*, 13 (1959) : 51-136  
 (On the schemes of logistic curves). *It*

G  
 8-01571

STA 3 (3) 3/301. Analyses some important theories on growth of population. Generalizing the Verhulst hypothesis he obtains new schemes. Shows sum of  $n$  simple logistic cycles may be represented by a generalized curve having upper limits equal to the sum of the upper limits of  $n$  cycles. Remarks on opportunity of generalizing Vinci's model, assuming upper limit of population to be variable, and obtains new models under hypothesis of an upper limit considered as a function of time and population size. In appendix, discusses mathematical implications in detail.

**Lunetta, G.** (1959)  
*Ann. Fac. Econ. Comm. Palermo*, 13 (1959) : 245-52  
 (On the estimation of parameters of simple logistic functions). *It*

G  
 8-01572

STA 3 (3) 3/303. Author considers some methods for estimating parameters. Gets, under certain conditions, stochastic equation. A population development problem is used to ill. application.

**Zelon, M. & M. C. Dannemiller** (1961)  
*Technometrics*, 3 : 29-49

G  
 8-01573

The robustness of life testing procedures derived from the exponential distribution

STA 3 (3) 3/377. Paper studies behaviour of several statistical life-testing procedures based on the exponential failure law if the true failure law is the Weibull distribution. It is found that these statistical techniques, which are widely used, are very sensitive to departures from initial assumptions.

**Consael, R.** (1959)

G  
8-01574

*Meded. Vlaamsche Acad. Kl. Wet.*, 45 : 845-58

(Concerning the mathematical theory of populations according to J. Neyman and E. L. Scott). *Fr*

STA 3 (3) 3/435. Purpose is to generalize results presented by Neyman & Scott.

**Williams, E. J.** (1961)

G  
8-01575

*Aust. J. biol. Sci.*, 14 : 598-604

The distribution of larvae of randomly moving insects

STA 3 (3) 3/458. Concerned with the spatial distribution of larvae laid by moths released from some central point so that they are themselves distributed as a circular normal distribution, for case where moths are equally mobile, and move independently at random; each female lays eggs at a constant daily rate; moths have equal chance of death in any period. Points out that, as in other cases for which a quantitative or mathematical law fitting the phenomenon does not provide conclusive evidence as to its causes, two other sets of assumptions result in the same distribution for the larvae. Concludes with estimation of scale parameter of distribution and derivation of asymptotic variance of this when centre of distribution is known. Theory applicable to movements of aquatic organisms.





# CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

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- Anon.** (1962) M  
8-02001  
*New Scient.*, 14 (291) : 586  
Nuclear beacon for the deep—United States

Radioisotope strontium-90 as a source of heat for sound beacon to be placed as a navigation aid on the sea floor.

- Hewer, H. R.** (1962)\* M  
8-02002  
London Sunday Times Publ., Ltd., "Animals of Britain: an illustrated series", No. 7  
Grey seals

- West Indies. Ministry of Natural Resources & Agriculture** (1962) M  
8-02003  
*W. Ind. Fish. Bull.*, (2) : 58 p.

Co 62-01364. This, due to dissolution of Federation, is last issue of the Bulletin.

- Anon.** (1962) M  
8-02004  
*New Scient.*, 15 (294) : 10  
Notes and comments—The new 'Discovery' enters the water

Launching of Britain's new oceanographic "flagship".

- Anon.** (1962) M  
8-02005  
*New Scient.*, 15 (294) : 11  
Notes and comments—The hydrographer collects deep-sea soundings

To help navigators, produced a series of oceanic plotting sheets on which the tracks of a ship and the soundings it records can be recorded.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

**Anon. (1962)**  
*Science*, 137 (3525) : 214  
 Announcements

M  
 8-02006

Incl. note on a three-man self-propelled deep sea vehicle, capable of operating at a depth of 12,000 feet, to be built by Westinghouse Electric Corporation as its own laboratory facility for marine studies. 7-ton spherical vessel, to be called 'Deepstar'.

**Anon. (1962)**  
*Science*, 136 (3521) : 1043  
 Announcements

M  
 8-02007

Incl. Stanford University's Hopkins Marine Station plans to acquire the schooner 'Te Vega' for use as a "floating classroom" in marine biology and oceanographic research.

**Deacon, G. E. R. (1962)**  
*Mar. Obs.*, 32 (197) : 125-7  
 The National Institute of Oceanography

M  
 8-02008

**Anon. (1962)**  
*New Scient.*, 15 (301) : 409

M  
 8-02009

Science in overseas industry—United States. Anchor that buries itself in the seabed

Fires itself into seabed to provide a permanent, very strong anchorage up to 300 times its own weight, at low cost, is being tried out. Applications incl. the anchoring by guy-wires of offshore drilling towers, marine laboratories. Named Seastaple, being developed by Advanced Systems Development Division of Pneumo Dynamics Corp., El Segundo, California.

**Terada, K. (1962)**  
*Geophys. Mag.*, Tokyo, 31 (1) : 127-45

M  
 8-02010

Recent activities of the Marine Division and its related branches of the Japan Meteorological Agency

Original of this paper was presented by author and circulated to the attendants of third session of Commission for Maritime Meteorology of WMO held at Utrecht in 1960. This is a revised up-to-date version.

**Poulsen, E. M. (1962)**  
*ICNAF Newsl.*, (42) : 4 p.

M  
 8-02011

Co 62-06296.

# GENERAL

- Anon. (1962)** M  
8-02012  
*Norsk Hvalfangsttid.*, 51 (7) : 291-3  
 International Whaling Commission fourteenth annual meeting  
 No 61-169me.

- Anon. (1962)** M  
8-02013  
*Pêche marit.*, (1007) : 72-3  
 La campagne du 'Thalassa' en mer de Norvège et en mer de Barentz  
 (28 octobre au 15 décembre) (The cruise of the 'Thalassa' in the Norwegian  
 and Barents Seas, 28 October to 15 December)

Contains results of the cruise.

- Carbonnel, J. P. (1962)** M  
8-02014  
*Nature, Paris*, (3327) : 294-9  
 Plus maniable que les bathyscaphes, la soucoupe plongeante permet  
 l'exploration du plateau continental (More manageable than bathyscaphs,  
 the diving saucer permits exploration of continental shelf)

Describes and ill. this equipment, and its operation from 'Calypso'.

- Rivoire, J. (1962)** M  
8-02015  
*Nature, Paris*, (3328) : 329-32  
 Nouveaux progrès dans la plongée sous-marine (New progress in submarine  
 diving)

Notes on mesoscaphé, diving saucer, underwater sealed tanks.

- Higman, J. B. (Ed.) (1962)** M  
8-02016  
*Proc. Gulf Caribb. Fish. Inst.*, 14 (1961) : 250 p.

Do 61-131me. Opening session, 8-02274; shrimp session, 8-02382; 8-02384;  
 8-02275; 8-02276; international session, 8-02277; 8-02305; 8-02306; 8-02322;  
 8-02323; oceanographic session: 8-02083; 8-02084; 8-02085; estuarine session,  
 8-02119; 8-02227; 8-02445; 8-02446; 8-02447; Caribbean session; 8-02278  
 to 8-02281; 8-02385; 8-02386; 8-02499.

- Bermuda. Director of Agriculture & Fisheries (1962)** M  
8-02017  
*Rep. Dir. Agric. Fish. Bermuda*, 1961 : 14 p.

Incl. chapter on aquarium, museum and fisheries, and accounts. This  
 issue refers to impending revision of 1953 fisheries regulations and proposal  
 to set aside area of coral reef as a reserve.

- Florida State Board of Conservation (1962)** M  
8-02018  
*Salt Wat. Fish. Newslett.*, 4 (2) : 4 p.

Contains notes on GCFL, shrimp, seatrout, ecology of Florida Bay, Florida  
 landings, spiny lobster, sport fish, technology, publications.

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**National Shellfisheries Association** (1961)  
*Proc. nat. Shellfish. Ass.*, 50 (1959) : 199 p.

M  
 8-02019

Whole contains report on association affairs, incl. 1959 annual convention, list of officers and members, and texts of papers contributed to symposium—8-02390 to 8-02404; 8-02285, 8-02286, 8-02287.

**Bezrukov, P. L.** (1961)\*  
*Okeanologiya*, 1 (4)

M  
 8-02020

(Investigations in the Indian Ocean on the 33rd cruise of the expeditionary vessel 'Vityaz '). *Ru*

**Kovylin, V. M.** (1961)\*  
*Okeanologiya*, 1 (4)

M  
 8-02021

(Third Mediterranean cruise of the E/V 'Academician S. Vavilov '). *Ru*

**Kühnemann, O.** (1961)  
*Mirador*, (10) : unpag. Repr., 7 p.

M  
 8-02022

Importancia económica de las investigaciones sobre biología marina (Economic importance of marine biological investigations)

A semipopular article with colour ill.

**International Hydrographic Conference, 8th, 1962** (1962)  
 Monaco, IHB, 5 p.

M  
 8-02023

Final report on the financial administration of the International Hydrographic Bureau from 1st January 1957 to 31st December 1961

**Knox, R. W.** (1962)  
 Monaco, IHB, 11 p.

M  
 8-02024

8th International Hydrographic Conference—Opening address

**France. Institut Océanographique** (1961)  
*Ann. Inst. océanogr.*, Paris, 39 (5) : 275 p.

M  
 8-02025

Résultats scientifiques des campagnes de la 'Calypso' (Scientific results of the 'Calypso' cruises)

Contains 8-02217 to 8-02223, 8-02183, 8-02407.

**Maryland. Commission on Research & Education** (1961)  
*Educ. Ser. Md. Dep. Res. Educ.*, (52) : 21 p.  
 Final report 1941-1961 of the ...

MF  
 8-02026

Functions of the commission and the department, together with its staff and its physical assets, have been transferred to the University of Maryland in the form of the newly created Natural Resources Institute. Summary of results achieved by the department under the direction of the commission since 1941.



# GENERAL

**U.S. National Science Foundation (1961)** MF  
Washington, NSF (61-68) : 528 p. 8-02027

Specialized science information services in the United States—A directory of selected specialized information services in the physical and biological sciences

Contains, in subject order, notes on names, addresses, scope, facilities, services, publications of various organizations, many of which are of relevance to fisheries and aquatic sciences research, especially under subject headings: Conservation; Biological sciences; Earth sciences; Health, water pollution; General science.

**Germany. Federal Republic. Bundesministerium für Ernährung, Landwirtschaft & Forsten (1962)** MF  
*Inform. Fischw. Ausl.*, 12 (1) : 55 p. 8-02028

Co 62-01161.

**Campbell, B. (1962)** MF  
*New Scient.*, 14 (292) : 663 8-02029  
Animals of Britain: an illustrated series

Re 8-02042 and 8-02002.

**Komissiiia po Rybokhoziaistvennomu Issledovaniuu Zapadnoi Chasti Tikhogo Okeana. Postoiannyi Sekretariat (1960)** MF  
Peking, China, 86 p. 8-02030

Materialy chetvertogo plenuma komissii po rybokhoziaistvennomu zapadnoi chasti Tikhogo okeana (Na piati iazykakh) (Proceedings of the fourth meeting of the Commission for Fisheries Investigation of the Western Pacific—In 5 languages)

Co 58-6762. Contains short account of meeting; texts of speeches of introduction and welcome; reports and summing up by chairman, vice-chairman and secretary; financial report, resolutions and recommendations for collaboration; reports of activities of national sections; program of work of the subject sections; recommendations for publication of report and contributed papers of the meeting. Contains also list of titles and authors of scientific contributions to the meeting; recommended amendments to and resolutions concerning article 2 of the agreement, its preamble, and point 6 of the rules of procedure; financial contributions of members, and preparation and publication of proceedings of this and future meetings of Commission.

**Australia. CSIRO. Department of Primary Industry.**  
**Fisheries Division** (n.d. 1962)  
 Canberra, 255 p.

MF  
 8-02031

Fisheries field officer's handbook

Based on course for fisheries field officers held at CSIRO, Marine Laboratory, Cronulla, NSW, 1961. Compilation prepared from lectures given, and from notes used in practical classes. Deals with methods, chiefly those used in field, of investigating resources to obtain information required by government for the purposes of management and regulation. Glossary of technical terms incl. Main chapter headings are: Role of governments in fisheries—fact finding, policy making for the industry, development, regulation, administration, part played by fisheries field officers; Fishery resources—identification, location, populations, behaviour, magnitude and fluctuations, methods used in fisheries biology; Measuring catch and effort—importance to economist, to fisheries biologist, monthly catch returns, fishermen's log books, statistical methods; Fishing operations—description and classification of fishing gear, characteristics of gear in relation to fishing power and selectivity, description and classification of fishing operations, description and classification of boats; description and classification of shore facilities, fish handling and storage.

**Pacific Marine Fisheries Commission** (n.d. 1961?)  
*Rep. Pacif. Mar. Fish. Comm.*, 1960, (13) : 60 p.

MF  
 8-02032

Meetings, actions taken, finances. Appendices on status of the Pacific coast albacore fishery, status of the Pacific coast crab fishery, of the pink shrimp fishery of the Pacific coast, of the groundfish fisheries of the Pacific coast, of the 1960 ocean salmon fishery and a review of past landings, Oregon crab seasons and their effect on the quality and quantity of crabs landed; northern Oregon—Washington shrimp studies; northern California shrimp study; migrations of English sole, *Parophrys vetulus*, on the Pacific coast of US; coastal movements of petrale sole as determined from tag recoveries; report on the Washington—Oregon spring troll chinook tagging; the sport fisheries for salmon in Washington, Oregon and California; use of and comparative hooking mortality between treble and single hooks.

**Canada. Fisheries Research Board of** (1962?)  
*Rep. biol. Sta., St. Andrews*, 1961–62 : 227 p.

MF  
 8-02033

Annual report and investigators' summaries 1961–62

Lists staff and publications for the station. Director gives short summaries of each subject of investigation; more detailed account by the staff on "lobster, molluscan shellfish, groundfish, herring, trout, salmon, inshore cod project, pollution, fisheries oceanography, smelt, mathematical statistics"—stock assessments.

**McKernan, D. L.** (1961)  
*Proc. Gulf Caribb. Fish. Inst.*, 13 (1960) : 1–21

MF  
 8-02034

The role of international commissions in world fisheries

Considers fishing problems of international nature, and means for their solution, participation of the US in various commissions and their achievements.

# GENERAL

**FAO. Conference (1962)** MF  
*Rep. Conf. FAO*, 11 (1961) : 157 p. 8-02035

No 60-328me, containing commentary on Fisheries Division program and work and budget for 1962-63.

**Germany. Federal Republic. Bundesministerium für Ernährung, Landwirtschaft & Forsten (1962)** MF  
*Inform. Fischw. Ausl.*, 12 (6-7) : 57 p. 8-02036

Co 62-01161.

**France. Conseil Supérieur de la Pêche (1961)** MF  
*Bull. Cons. sup. Pêche*, (46) : 138 p. 8-02037

Co 62-03449.

**IPFC (1962)** MF  
*Curr. Aff. Bull. Indo-Pacif. Fish. Coun.*, (34) : 43 p. 8-02038

Co 62-03447.

**Klassen, C. W. (1962)** MF  
*Publ. Hlth Pap.*, (13) : 9-19 8-02039  
 The Water Pollution Control Agency: legal basis, administration, regulations and staffing

CR 62-03413.

**Germany. Federal Republic. Bundesministerium für Ernährung, Landwirtschaft & Forsten (1962)** MF  
*Inform. Fischw. Ausl.*, 12 (2) : 51 p. 8-02040

Co 62-01161.

**Geyer, J. W. C. (1962)** MF  
*S. Afr. J. Sci.*, 58 (7) : 206-7 8-02041  
 The South African Fauna Research Organization

Note on formation of this new body, its aims, structure and officers, incl. sub-committee on salt- and fresh-water animals.

**Neal, E. G. (1962)\*** F  
 London, Sunday Times Publ. Ltd., "Animals of Britain: an illustrated series", 8-02042  
 No. 8  
 Otters

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- Anon.** (1962) F  
8-02043  
*G. Pesca*, 12 (13-14) : 3, 6  
 Centro ittigenico sperimentale in Valtellina (Ichthyogenic experimental center in Valtellina). *It*

- Petrik, M.** (1962) F  
8-02044  
*Publ. Hlth Serv.*, (13) : 39-51  
 Organization of surveys  
 CR 62-03060.

- Moore, W. H.** (1961) FG  
8-02045  
*Proc. Instn Electron.*, 4 (2) : 38-42  
 An eighteen-point fish movement recorder

Apparatus devised to detect and record movement of trout living under conditions as nearly natural as possible. Fish were individually caged and kept on the bed of lake Windermere, in water 2-4 metres deep. Problem was to detect fish's movements without it being conscious of detecting device. Experiment showed that it was possible to detect conductometrically.

- Anon.** (1961) G  
8-02046  
*Trans. Amer. geophys. Un.*, 42 (4) : 464  
 7th general assembly—Pan American Institute of Geography and History

## PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

- France. Comité Central d'Océanographie et d'Étude des Côtes** M  
8-02047  
 (1959)  
*Cah. océanogr.*, 11 (5) : 265-370

Contains sections on general information: technical notes—8-01119 and 8-01120; documentation received by secretariat, and tables and diagrams of observations—8-01121.

- Anon.** (1962) M  
8-02048  
*New Scient.*, 13 (279) : 670-1  
 Reducing discharge of radioactivity in the sea

- Anon.** (1962) M  
8-02049  
*New Scient.*, 13 (282) : 11-2  
 Seychelles observations show value of ocean survey

International Indian Ocean expedition. H.M.S. 'Owen' is completing magnetic, gravity and topographical survey of north-west corner of ocean between Mauritius, Bombay and Aden.



- Loncarevic, B. D. & D. H. Matthews** (1962) M  
8-02050  
*New Scient.*, 14 (290) : 513-5  
 Geographical reconnaissance of the Arabian Sea

As preliminary contribution to International Indian Ocean expedition, Royal Navy survey ship 'Owen' explores little-known waters of the Arabian Sea. First impressions indicate important discoveries about the eastern margin of Africa.

- Anon.** (1962) M  
8-02051  
*New Scient.*, 14 (284) : 525  
 USSR—Arctic tidal power

Plans approved for the construction in 1963 of an experimental tidal power station at Kislogubsk on the shores of the White Sea.

- Anon.** (1962) M  
8-02052  
*New Scient.*, 14 (292) : 658  
 Where the Cromwell Current goes

- Fairbridge, R. W.** (1962) M  
8-02053  
*New Scient.*, 15 (298) : 242-5  
 Sea-level and climate

Long-term changes in absolute sea-level can be correlated with variations in general climate. Radiocarbon dating of shells along old beachlines made possible precise history of shoreline changes, and from this future climatic trend can be calculated.

- Anon.** (1962) M  
8-02054  
*New Scient.*, 15 (298) : 263  
 Trends and discoveries—A preliminary Soviet map of the Indian Ocean

Summarizes information on topography of ocean obtained by 'Vityaz' during two voyages in 1959-60 and 1960-61, from an article by P. Zamotski in *Priroda*.

- Muraour, P., G. Boillot & J. Merle** (1962) M  
8-02055  
*Bull. Inst. océanogr., Monaco*, (1228) : 10 p.  
 Étude sismique par réfraction au large de Roscoff (Finistère) (Seismic study by refraction off Roscoff, Finistère). En

Geological studies made evident the presence, 6 km from the isle of Batz, of holes carved in the Eocene limestone, and the bottom of which dredging revealed to be composed of red clay. Along a profile of about 9 km, 16 stations were shot, among which 11 stations provided available records. Resulting time-distance curve shows but one refracting layer, the granitic one.

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**Hachey, H. B.** (1962)

M

*Bull. Fish. Res. Bd Can.*, (134) : 120 p.

8-02056

Oceanography and Canadian Atlantic waters

Submarine topography; oceanographic history; some basic principles; circulation in the western North Atlantic; atmospheric circulation over the western North Atlantic; interactions between sea and atmosphere; ice problems off the Atlantic coast; oceanographic environments; Canadian problems in oceanography; Canadian organization for oceanography; general bibliography of Canadian contributions; selected bibliography.

**Anon.** (1962)

M

*New Scient.*, 14 (293) : 706

8-02057

Science in British industry—Stable platform for deep sea work

New type of marine platform which provides a stable deck for operations in high seas announced by Intercontinental Marine Development Ltd., and Cammell Laird & Co. Experimental models of platform have been demonstrated. Tests completed successfully in the National Physical Laboratory's Ship Tank at Feltham and an experimental programme has been carried out at the Imperial College of Science and Technology. Platform was shown at Institution of Civil Engineers' Conversazione.

**Gaskell, T.** (1962)

M

*New Scient.*, 15 (294) : 13-5

8-02058

Prospecting for oil in the North Sea

Seismic exploration begins, over a large area of the sea lying between the oilfields of the English midlands and those of Holland and Germany, in the hope of detecting formations in the underlying strata which might indicate the presence of oil or natural gas.

**Pequegnat, W. E.** (1962)

M

*Science*, 135 (3507) : 1000-5

8-02059

Meetings—Shallow-water oceanography

No 61-070me, 61-071me and 61-072me. Report of the meetings with brief descriptions of the papers contributed, under main headings: Description of research and training activities planned; Discussion of individual or group research projects; Description of new techniques or instruments applicable to shallow water oceanography.

**Lewis, D. H.** (1962)

M

*Mar. Obs.*, 32 (197) : 131-4

8-02060

Notes on heavy weather in the Atlantic (1960) and North Sea (1961)

**Anon.** (1962)

M

*Mar. Obs.*, 32 (197) : 138

8-02061

Effects of the apparent wind on shipboard

**G.A.T. (1962)**

M  
8-02062

*Mar. Obs.*, 32 (197) : 138-45

Notes on ice conditions in areas adjacent to the North Atlantic Ocean from January to March 1962

**NODC (1962)**

M  
8-02063

Washington, D.C., NODC Publ. M-2, 103 p.

Processing physical and chemical data from oceanographic stations

Describes methods used at NODC for reducing processed data to standard format. Intended also for use by other agencies or contributors interested in furnishing oceanographic data to or making their data systems compatible with NODC. Outline of format of computed card is incl. and a set of tables is appended, giving codes for sea-state, windspeed, wave height and direction, water colour, depths, Masden squares, country code, weather, cloud, visibility, oxygen, silicates, phosphorus, nitrate, nitrite, salinity-chlorinity, and various conversion factors and tables.

**Joseph, E. B., W. H. Massmann & J. J. Norcross (1962)**

M  
8-02064

*Contr. Va Fish. Lab.*, 1960-61 (95)

Investigations of inner continental shelf waters off lower Chesapeake Bay—Part 1. General introduction and hydrography

CR 62-00884.

**Miyake, Y. et al. (1961)**

M  
8-02065

*J. Radio Res. Labs*, 2 (1) : 25-8

Caesium-137 and strontium-90 in sea water

WPA 35 (7) 1332. Concentrations in northwest Pacific Ocean were determined in 1959 and 1960; values higher than in northeast Pacific and Atlantic.

**Zenkovitch, V. P. (1962)**

M  
8-02066

*Ingenieur, 's Grav.*, 74 : B81-9

Application of luminescent substances for sand-drift investigations in the near-shore zones of the sea

WPA 35 (7) 1345. Describes experiments in USSR, use of fluorescent substances; natural sand from beach or sea bottom is coated with colloidal film. Advantages and disadvantages are discussed.

**McNamara, E. J. (1961)**

M  
8-02067

*Wastes Engng*, 32 : 74-6

A sea-going sewage works

WPA 35 (7) 1362. Sewage-treatment plant serving offshore sulphur-mining plant in the Gulf of Mexico is described. Effluent is discharged to Gulf.

- Townsley, S. J., D. F. Reid & W. T. Ego** (1962) M  
8-02068  
U.S. Atom. Energ. Comm., TID-14420. 36 p.

The accumulation of radioactive isotopes by tropical marine organisms—  
Annual report 1960-61

WPA 35 (7) 1430. Effect of light and enzyme inhibitors on uptake of phosphorus-32 and zinc-65 by mushroom coral, *Fungia scutaria*, was studied, and preliminary experiments were carried out on the ability of this coral to remove dissolved organic matter (glucose) labelled with carbon-14. Uptake of chromium-51 from sea water by alga, *Ulva lactuca*, and eggs of ascidian, *Pyura momus*, also investigated.

- Miyake, Y. et al.** (1961) M  
8-02069  
Tokyo, Met. Res. Inst., 12 p.

Penetration of artificial radioactivity in deep waters of the Pacific and vertical diffusion rate of sea water

WPA 35 (7) 1431. Studies confirmed that strontium-90 and caesium-137 of artificial origin have penetrated to depth of 5000 m in the northwest Pacific. Vertical diffusion coefficient calculated, estimated that complete vertical mixing takes about 700 years.

- Herrera, J.** (1961) M  
8-02070  
*Invest. pesq.*, (19) : 5-15

Datos climáticos del puerto de Castellón y térmicos de las aguas costeras superficiales, en 1959 (Climatic data of the Castellón Harbour and temperature of the surface coastal waters in 1959). En

Meteorological data from harbour of Castellón—eastern coast of Spain—and temperatures of superficial waters for 1959 are summarized.

- Margalef, R. & J. Herrera** (1961) M  
8-02071  
*Invest. pesq.*, (19) : 55-63

El nivel del mar en Castellón (Sea level in Castellón). En

Study of tides, seiches and other factors causing fluctuations in the sea level.

- Fraga, F. & F. Vives** (1961) M  
8-02072  
*Invest. pesq.*, (19) : 65-79

La descomposición de la materia orgánica nitrogenada en el mar (Decomposition of nitrogen organic matter in the sea). En

Total organic nitrogen, dissolved organic nitrogen and volatile one were determined, and the suspended organic nitrogen was computed by difference.

- Leipper, D. F.** (1961) M  
8-02073  
*Trans. Amer. geophys. Un.*, 42 (4) : 429-31

Oceanography—A definition for academic use



**Golubeva, V. N. (1961)\***

M  
8-02074

*Izv. Akad. Nauk SSSR (geofiz.)*, (5)

(On the theory of the mixed surface layer of the sea). *Ru*

**Olevinskaia, S. K. (1961)\***

M  
8-02075

*Izv. Akad. Nauk SSSR (geofiz.)*, (6)

(Contribution to theory of thermal interactions between sea, atmosphere and continent). *Ru*

**Anon. (1961)**

M  
8-02076

*Trans. Amer. geophys. Un.*, 42 (4) : 518-25

IGY bulletin—Biological oceanography in the North Polar Sea from IGY drifting station Alpha, 1957-58

Vertical distribution of physical and chemical properties, phytoplankton and organic production.

**Hokkaido University. Faculty of Fisheries (1962)**

M  
8-02077

*Data Rec. oceanogr. Obsns explor. Fish.*, (6) : 283 p.

Preliminary data from oceanographic, biological or exploratory-fishing researches carried out on the regular or occasional cruises of the training ships of the Faculty of Fisheries.

**Perez Sori, J. A. (1962)**

M  
8-02078

*Contr. Cent. Invest. pesq., Cuba*, (16) : 27 p.

Datos oceanograficos de la Playa Habana—3. (Oceanographic data of the Playa Habana—3.). *Fr*

Data on salinity, pH, air and water temperature, atmospheric pressure and relative humidity.

**Odhner, N. H. (1962)**

M  
8-02079

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Bilateral constriction in the ocean bottoms. *Fr*

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*J. Wat. Poll. Contr. Fed.*, 33 : 1267-76  
 Thermal pollution problem

Affects mainly domestic supplies and also fisheries where the dissolved O<sub>2</sub> content is important. Limitation proposed by Aquatic Life Advisory Committee of the Ohio River Valley Water Sanitation Commission. The effect of air temperature on water temperature is described with some examples.

- Davies, J. T.** (1962) F  
8-02164  
*Chem. & Ind.*, 1962 : 906-10  
 Some effects of surface-active agents on waves and ripples

Published work on damping of induced ripples is reviewed and latest research described, incl. discussion of alterations in hydrodynamic conditions near surface of a wind-blown lake in the presence of a monomolecular "slick" of hexadecanol.

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**Mullins, J. W. et al.** (1961)

F  
8-02165

*J. Amer. Wat. Wks Ass.*, 53 : 1466-72

Evaluation of method for counting gross radioactivity in water

Water containing a radionuclide was distributed to several agencies for counting. Half the laboratories returned the gross radioactivity within 10-15% of the true value.

**Woods, D. E.** (1961)

F  
8-02166

*Fish. Ser. Minn. Dep. Conserv.*, (3) : 51-60

The effect of compressed air on winter oxygen levels in a fertile southern Minnesota lake

SFA 7 (2) 4905. Removal of portion of ice cover with compressed air proved to be an unsuccessful means of maintaining adequate winter dissolved oxygen levels in a small lake.

**Adams, R. D. & D. A. Christoffel** (1962)

M  
8-02167

*J. geophys. Res.*, 67 (2) : 805-13

Total magnetic field surveys between New Zealand and the Ross Sea

During summers 1958-59 and 1959-60, surveys made with ship-towed nuclear spin magnetometers. Total field contours are given for region between New Zealand and 70° S and for the Ross Sea area. Magnetic anomalies in different bathymetric regions are discussed and interpretations given.

**Dupree, H. K.** (1960)

F  
8-02168

*Proc. Conf. stheast. Ass. Game Commrs*, 14 : 132-7

The arsenic content of water plankton, soil and fish from ponds treated with sodium arsenite for weed control

SFA 7 (2) 4920. Analyses were made of over 1,000 samples of water, plankton, soil and fish from a 22-acre, a 26-acre, and eight 0.25-acre earthen ponds that were treated with different amounts of sodium arsenite.

**Douglas, N. H.** (1960)

F  
8-02169

*Proc. Conf. stheast. Ass. Game Commrs*, 14 : 215-22

A study of the comparative use of different species of fish in the toxicity bioassay of petroleum refinery effluent

SFA 7 (2) 4928. Presents comparison of 4 spp. as test animals.

**Ryhänen, R.** (1961)

F  
8-02170

*Ann. zool. Soc. Vanamo*, 22 (8) : 70 p.

Über die Einwirkung von Grubenabfällen auf einen dystrophen See (On the influence of wastes from mines on dystrophic lakes). Su

General survey of problem, with special reference to conditions in Finland and Scandinavia.



# PLANKTON

## PLANKTON

**Trégouboff, G.** (1962) M  
8-02171  
*Bull. Inst. océanogr. Monaco*, (1226): 14 p.

Prospection biologique sous-marine dans la région de Villefranche-sur-Mer en janvier 1961 (Underwater biological prospection in the region of Villefranche-sur-Mer in January 1961). En

Account is given of visual biological, and, to some extent, ecological observations made during the two recent dives of the bathyscaph F.N.R.S. III. Observations of microplankton and temperature curve.

**Patten, B. C.** (1962) M  
8-02172  
*Contr. Va Fish. Lab.*, 1960-61 (92)  
Negentropy flow in communities of plankton

CR 61-11646.

**Patten, B. C.** (1962) M  
8-02173  
*Contr. Va Fish. Lab.*, 1960-61 (93)  
Plankton energetics of Raritan Bay

CR 62-04689.

**Occhipinti, A. G., A. Magliocca & C. Teixeira** (1961) M  
8-02174  
*Bol. Inst. oceanogr. S. Paulo*, 11 (3) : 18-39

Diurnal variation of phytoplankton production and solar radiation in coastal waters off Cananéia. Es

First estimate of primary productivity of the Cananeia region, São Paulo, Brazil.

**Teixeira, C. & M. B. Kutner** (1961) M  
8-02175  
*Bol. Inst. oceanogr. S. Paulo*, 11 (3) : 41-73

Contribuição para o conhecimento das diatomáceas da região de Cananéia (Contribution to the knowledge of the diatoms of the Cananeia region). En

A list of diatoms found in the region of Cananeia is given. Description of the diatoms recorded for the first time in Brazilian waters.

**Narchi, W.** (1961) M  
8-02176  
*Bol. Inst. oceanogr. S. Paulo*, 11 (3) : 75-7

*Dentostomina besnardii*, nova espécie de foraminífero (*Dentostomina besnardii*, new species of Foraminifera). En

Description of the sp. from Banco de São Tomé—lat. 22° 08' S—long. 40° 39' W—and Trindade—lat. 20° 33' S—long. 29° 22' W—, coast of Brazil.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

**Vives, F. & F. Fraga (1961)**

**M**

*Invest. pesq.*, (19) : 17-36

8-02177

Florística y sucesión del fitoplancton en la Ría de Vigo (Flora and succession of phytoplankton in the Ría de Vigo). En

Results of the floristic analysis of the phytoplanktonic samples taken in two points of Ría de Vigo in the season 1958 and 59 are shown; and the seasonal distribution of the more typical spp. is given.

**Margalef, R. (1961)**

**M**

*Invest. pesq.*, (19) : 81-101

8-02178

Distribución ecológica y geográfica de las especies del fitoplancton marino (Ecological and geographical distribution of the species of marine phytoplankton). En

An attempt to determine ecological and geographical meaning of spp. for the purpose of using them as biological indicators in routine work in relation with hydrography and fisheries.

**Vives, F. & F. Fraga (1961)**

**M**

*Invest. pesq.*, (19) : 129-37

8-02179

Producción básica en la Ría de Vigo (NW de España) (Basic production in the Ría de Vigo, NW of Spain). En

Basic production of the sea water of Ría de Vigo, has been calculated on the basis of some samples during the season from Mar. 1958 to Feb. 1959. Cellular volumes of the phytoplanktonic organisms and their plant pigments content have been used in the computation.

**Godeaux, J. (1962)**

**M**

*Résult. sci. Expéd. océanogr. belge Atlant. Sud*, 3 (7) : 32 p.

8-02180

Tuniciers pélagiques (Pelagic tunicates)

**Fraga, F. & F. Vives (1961)**

**M**

*Invest. pesq.*, (20) : 65-71

8-02181

Variación estacional de la materia orgánica en la Ría de Vigo (Seasonal variation of the organic matter in the Ría de Vigo). En

The equation relating the organic nitrogen production with the solar energy on the sea surface and the sea temperature is verified in two hydrographic stations.

**Margalef, R. (1961)**

**M**

*Invest. pesq.*, (20) : 131-43

8-02182

Fitoplancton atlántico de las costas de Mauritania y Senegal (Atlantic phytoplankton of the coasts of Mauritania and Senegal). En

Study of a small number of samples of surface plankton with comments on some spp. of interest.

# PLANKTON

**Bernard, F.** (1961)

M  
8-02183

*Ann. Inst. océanogr., Paris*, 39 (5) : 61-160

Campagne 1955 en Méditerranée nord-orientale (suite)—3. Problèmes de fertilité élémentaire en Méditerranée de 0 à 3 000 mètres de profondeur. Campagne de la 'Calypso' (juillet 1955) (Campaign 1955 in the north eastern Mediterranean—continuation—3. Problems of basic productivity in the Mediterranean, from 0 to 3,000 meters depth—'Calypso' campaign July 1955). En

Compares SW and SE basins of Mediterranean. Describes behaviour of the prevailing organisms—flagellates—, influence of suspended sand. Compares with other seas.

**Howell-Rivero, L.** (1962)

M  
8-02184

*Unesco Courier*, 15 (9) : 14-6

The ocean under a microscope

Popular article about marine plankton.

**Cassie, R. M.** (1962)

MF  
8-02185

*J. Anim. Ecol.*, 31 (1) : 65-92

Frequency distribution models in the ecology of plankton and other organisms

Mathematical frequency-distribution models for the distribution of organisms in space are discussed with particular reference to plankton ecology. Appropriate models for random distribution and underdispersion are respectively the Poisson series and the binomial series. A model, the "Poisson-log-normal" distribution, is proposed, in which the means of a continuous series of Poisson variates are distributed as a log-normal. This has the required degree of skewness and appears to estimate zero counts without bias. A method is shown for separating the parameters of different populations from a polymodal distribution, using log-probability paper.

**Brawerman, G.** (1962)

F  
8-02186

*Biochim. biophys. Acta*, 61 (2) : 313-5

A specific species of ribosomes associated with the chloroplasts of *Euglena gracilis*

**Meijering, M. P. D. & J. B. Redfern** (1962)

F  
8-02187

*Amer. Nat.*, 96 (886) : 61-4

Heart-beats as a measure of biotic time in the life of Daphniidae

**Patten, B. C.** (1962)

FG  
8-02188

*Contr. Va Fish. Lab.*, 1960-61 (94)

Preliminary method for estimating stability in plankton

CR 62-00146.

## BENTHOS

- Bedrosian, P. H.** (1961) M  
8-02189  
Thesis, Univ. of Florida, 173 p.  
Relationship of certain microscopic marine algae to  $Zn_{65}$
- DA 22 (9) : 3146. Study of radioactive decontamination capacity of *Gracilaria foliifera*, *Enteromorpha prolifera* and *Sphacelaria* sp. subjected to various controlled conditions of light and temperature in uptake experiments.
- Schmitz, E. H.** (1961) M  
8-02190  
Thesis, Univ. of Colorado, 179 p.  
Visceral anatomy of *Gammarus lacustris lacustris* Sars (Crustacea: Amphipoda)
- DA 22 (9) : 3310.
- Brafield, A. E.** (1961) M  
8-02191  
*Anim. Behav.*, 9 (3-4) : 234-5  
Orientated movements of marine molluscs
- Abstr. only. Do 61-046me.
- Baltus, E.** (1962) M  
8-02192  
*Biochim. biophys. Acta*, 5 (1-2) : 82-7  
Étude de la ribonucléase des nucléoles isolés à partir d'oocytes d'astéries (*Asterias rubens*) (Study of ribonuclease of nucleoli isolated from starfish oocytes, *Asterias rubens*). En
- Greuet, C.** (1962) M  
8-02193  
*Bull. Inst. océanogr. Monaco*, (1227) : 4 p.  
L'involution antérieure chez *Hydroides norvegica* (Gunnerus) (Annélide polychète) (The anterior involution in *Hydroides norvegica* (Gunnerus), polychaete annelid). En
- Embryology studied in culture of starved animal.
- Squires, H. J.** (1962) M  
8-02194  
*Bull. Fish. Res. Bd Can.*, (135) : 29 p.  
Giant scallops in Newfoundland coastal waters
- Exploratory fishing in summers of 1957 and 1958 showed several fairly large beds of giant scallops, *Placopecten magellanicus* Gmelin, on the Newfoundland west coast, smaller and fewer beds on the southwest coast. Gives sizes and ages. Reviews history of fishery. The most northerly N. American record of capture was made at northeast entrance to Pistolet Bay. Iceland scallops, *Chlamys islandicus* Müller, were taken incidentally during this survey, in generally deeper and colder water.



- M  
8-02195
- Bargmann, W., M. von Harnack & K. Jacob** (1962)\*  
*Z. Zellforsch.*, 56 : 573-94

(On the fine structure of the nervous system of the starfish (*Asterias rubens* L.). 1. A contribution to the comparative morphology of the ganglia).  
*De*

- M  
8-02196
- Li, C. P., B. Prescott & W. G. Jahnes** (1962)\*  
*Proc. Soc. exp. Biol.*, N.Y., 109 : 534-8
- Antiviral activity of a fraction of abalone juice

- M  
8-02197
- Parsons, T. R. & J. D. H. Strickland** (1962)  
*Science*, 136 (3513) : 313-4
- Oceanic detritus

Measures the quantity and chemical composition of oceanic detritus in the northeastern Pacific Ocean. Results indicate that oceanic detritus must be considered as a source of food for secondary producers.

- M  
8-02198
- Hargis, W. J., Jr. & C. L. MacKenzie, Jr.** (1961)  
*Nautilus*, 75 (1) : 7-16
- Sexual behavior of the oyster drills: *Eupleura caudata* and *Urosalpinx cinerea*

Observations reported are part of extensive study of the biology. Deals with copulatory behaviour, sperm viability and storage.

- M  
8-02199
- Hargis, W. J., Jr. & C. L. MacKenzie, Jr.** (1962)  
*Contr. Va Fish. Lab.*, 1960-61 (100)
- Sexual behavior of the oyster drills: *Eupleura caudata* and *Urosalpinx cinerea*

CR 8-02198.

- M  
8-02200
- Lane, C. E.** (n.d. 1962)  
[*Publ.*] *Mar. Lab. Univ. Miami*, (62-2) : 10 p.
- The general biology of *Teredo*

Narrative account of principal findings on the biology of *Teredo* and of their significance.

- M  
8-02201
- Kutner, M. B.** (1961)  
*Bol. Inst. oceanogr. S. Paulo*, 11 (3) : 3-15
- Algumas diatomáceas encontradas sobre algas superiores (Some diatoms found on higher algae). *En*

A list of diatoms found on the higher algae *Centroceras* sp., collected at Itanhaém, State of S. Paulo, Brazil, and *Ectocarpus* sp. and *Caulerpa racemosa* from Ubatuba, also in the State of S. Paulo, is given in this paper. 9 different spp. and the genus *Auricula*, are recorded. A new sp. *Navicula merchersi* is described.

**Zariquiey Alvarez, R. (1961)**

M

8-02202

*Invest. pesq.*, (19) : 103-10

Decápodos españoles—15. Sobre un raro crustáceo decápodo: *Albunea carabus* (Linneo 1758) (Spanish decapods—15. On a rare crustacean decapod *Albunea carabus* (Linnaeus 1758)). En

Record of occurrence on the shore of Castellón, eastern Spain. The only known records on the Spanish coast were in Minorca and Málaga. Morphological characters of the specimens are described and ill.

**Cornwall, I. E. (1962)**

M

8-02203

*Canad. J. Zool.*, 40 (4) : 621-9

The identification of barnacles, with further figures and notes

The identification of fossil and recent sessile barnacles by the figure in the shell and the tracing of ancient spp. through fossil remains is discussed and several examples of this are shown. A reason for the formation of the figures is discussed.

**Tattersall, O. S. (1962)**

M

8-02204

*Proc. zool. Soc., Lond.*, 139 (2) : 221-47

Report on a collection of Mysidacea from South African off-shore and coastal waters (1957-59) and from Zanzibar (1961)

List of spp. in collection is given. *Anchialina typica* (Kröyer) and *Euchaetomera typica* G. O. Sars, are new records for region; *Siriella pondoensis* and *Mysidopsis eremita* are new to science and are described and figured. 3 rare spp. of *Heteromysis*, commensal with spp. of hermit crabs, in association with an ophiuroid and within central cavity of sponge are recorded from Zanzibar. Additional notes, with figures, are given of morphology and ecology, the distribution of genus discussed and a key for the identification of spp. given.

**Lang, K. (1961)**

M

8-02205

*Ark. Zool.*, 13 (6) : 493-510

Contributions to the knowledge of the genus *Microcerberus* Karaman (Crustacea Isopoda) with a description of a new species from the central Californian coast

Taxonomic description of *M. abbotti* n. sp.

**Åkesson, B. (1961)**

M

8-02206

*Ark. Zool.*, 13 (6) : 511-31

The development of *Golfingia elongata* Keferstein (Sipunculidea) with some remarks on the development of neurosecretory cells in sipunculids

New observations about the development of the sp. collected in Roscoff, France.

- M  
8-02207
- Boaden, P. J. S.** (1961)  
*Ark. Zool.*, 13 (6) : 553-9

*MEGANERILLA swedmarki* nov. gen. nov. spec., an archiannelid of the family Nerillidae

Taxonomic description, systematics, habitat and behaviour of spp. of west Sweden.

- M  
8-02208
- Immers, J.** (1961)  
*Ark. Zool.*, 13 (6) : 561-4
- Incorporation of  $^{35}\text{SO}_4$  in the sea urchin egg and larva

Quantitative results on  $^{35}\text{SO}_4$  incorporation in different stages of development of *Paracentrotus lividus*.

- M  
8-02209
- Runnström, J.** (1961)  
*Ark. Zool.*, 13 (6) : 565-71

The mechanism of protection of the egg against polyspermy—Experiments on the sea urchin *Paracentrotus lividus*

- M  
8-02210
- Lang, K.** (1961)  
*Ark. Zool.*, 13 (6) : 573-7
- Further notes on *Pancolus californiensis* Richardson

Supplementary description of the mouth parts.

- M  
8-02211
- Barnard, J. L.** (1962)  
*Pacif. Nat.*, 3 (1) : 1-72

Benthic marine Amphipoda of southern California: families Aoridae, Photidae, Ischyroceridae, Corophiidae, Podoceridae

Keys to identification of genera and spp., and their diagnosis and relationships; notes on their ecology.

- M  
8-02212
- Barnard, J. L.** (1962)  
*Pacif. Nat.*, 3 (2) : 73-115
- Benthic marine Amphipoda of southern California: families Tironidae to Gammaridae

Co 8-02211.

- M  
8-02213
- Barnard, J. L.** (1962)  
*Pacif. Nat.*, 3 (3) : 116-63
- Benthic marine Amphipoda of southern California: families Amphilochidae, Leucothoidae, Stenothoidae, Argissidae, Hyalidae

Co 8-02212.

**Jolley, W. B. et al.** (1962)  
*J. Endocrin.*, 25 (2) : 183-8

M  
 8-02214

Effect of oestradiol-17B on cleavage, nucleic acid metabolism and protein synthesis in sea urchin, *Strongylocentrotus purpuratus*, embryos

**Jones, W. E.** (1962)  
*Field Stud.*, 1 (4) : 1-32

M  
 8-02215

A key to the genera of the British seaweeds

Ci 60-3917. Key developed from one used on courses at Marine Biology Station, Menai Bridge and at Dale Fort Field Centre. Based on key in Knight & Parke's "Manx Algae" (1931), modified by inclusion of genera not found on the Isle of Man and by addition of a key to the Cyanophyceae. Key further modified in light of experience gained during courses and expanded to incl. all genera in Parke's "Check List" (1953) and the later amendments—Parke 1956, -57, -59—, apart from a few minor exceptions and with the major change that the classification of Drouet & Daily (1956) has been adopted for the non-filamentous Cyanophyceae. Term "seaweeds" used in a limited sense of four classes in Newton's "Handbook" (1931)—Chlorophyceae, Phaeophyceae, Rhodophyceae and Cyanophyceae—the motile Chlorophyceae (Volvocales) are omitted.

**Ryland, J. S.** (1962)  
*Field Stud.*, 1 (4) : 33-51

M  
 8-02216

Biology and identification of intertidal Polyzoa

General review of biology—structure, classification, feeding, regeneration, life-cycle, preservation, identification—; key to British spp., check list and selected bibliography.

**Lévi, C.** (1961)  
*Ann. Inst. océanogr.*, Paris, 39 (5) : 3-32

M  
 8-02217

Campagne 1954 dans l'Océan Indien—Les spongiaires de l'île Aldabra (1954 cruise in the Indian Ocean—Sponges from Aldabra Island)

Identifies 42 spp., 8 of which are new to science.

**Rossi, L.** (1961)  
*Ann. Inst. océanogr.*, Paris, 39 (5) : 33-48

M  
 8-02218

Études sur le seuil Siculo-Tunisien (suite). 6. Madréporaires. Campagne de la 'Calypso' (août-septembre 1954) (Studies on the Siculo-Tunisian ridge (continuation). 6. Madreporaria. Cruise of the 'Calypso', August-September 1954)

Describes 14 spp. and discusses systematic and biogeographic problems.



M

**Bellan, G. (1961)**

8-02219

*Ann. Inst. océanogr., Paris*, 39 (5) : 49-60

Campagne de la 'Calypso': seuil Siculo-Tunisien—7. Annélides polychètes. Campagne de la 'Calypso' (août-septembre 1954) (Campaign of the 'Calypso': Siculo-Tunisian ridge—7. Annelida Polychaeta. Campaign of the 'Calypso', August-September 1954)

50 spp. are identified and used as indicators for littoral formation.

M

**Bellan, G. (1961)**

8-02220

*Ann. Inst. océanogr., Paris*, 39 (5) : 161-78

Campagne de la 'Calypso': Méditerranée nord-orientale—4. Annélides polychètes—Campagne de la 'Calypso' (septembre-octobre 1955) ('Calypso' campaign: north-east Mediterranean—4. Annelida Polychaeta. Cruises of the 'Calypso', September-October 1955)

Identifies 54 spp. from eastern Mediterranean which are used as indicators for littoral zonation.

M

**Stubbings, H. G. (1961)**

8-02221

*Ann. Inst. océanogr., Paris*, 39 (5) : 179-92

Campagne de la 'Calypso' dans le golfe de Guinée et aux îles Principe, São Tomé, Annobon (1956) (suite)—11. Cirripedia ('Calypso' cruise in the Gulf of Guinea, and at Principe and São Tomé Islands—continuation—11. Cirripedia)

Report on 12 spp. and var. of Cirripedia, 3 spp. of barnacles, 8 of sessile forms, 1 acrothoracian. Systematic and biogeographic problems are discussed.

M

**Tixier-Durivault, A. (1961)**

8-02222

*Ann. Inst. océanogr., Paris*, 39 (5) : 237-62

Campagne de la 'Calypso': golfe de Guinée—14. Les octocoralliaires du golfe de Guinée et des îles du Cap-Vert (Alcyonacea, Pennatulacea) (Campaign of the 'Calypso': Gulf of Guinea—14. Octocorallia from the Gulf of Guinea and Cape Verde Islands, Alcyonacea, Pennatulacea)

Co 8-02407. Describes 14 spp., 5 new to science—*Bellonella conspicua*, n.sp., *B. madseni* n.sp., *Gersemia subtilis* n.sp., *Eunephthya alba* n.sp., *Pteroeides morbosus* n.sp.

M

**Costa, S. (1961)**

8-02223

*Ann. Inst. océanogr., Paris*, 89 (5) : 269-75

Campagne de la 'Calypso' en mer d'Alboran et dans la baie Ibéro-Marocaine (1958) (suite) 3. Amphipodes (Campaign of the 'Calypso' in the Alboran Sea and in the Ibero-Moroccan Bay, 1958 (continuation). 3. Amphipoda)

Lists spp. collected with some systematic remarks.

M

**MacNae, W.** (1962)

8-02224

*S. Afr. J. Sci.*, 58 (7) : 208-12

The fauna and flora of the eastern coasts of southern Africa in relation to ocean currents

Text of paper presented at Port Elizabeth congress of the S. African Association for the Advancement of Science. Charts of currents of SW Indian Ocean, and zoo-geographical considerations; reference mainly to worms, corals, fiddler crabs, mangrove fauna.

MF

**Margalef, R.** (1961)

8-02225

*Invest. pesq.*, (19) : 111-8

Variaciones intraspecíficas de los pigmentos asimiladores en clorofíceas y fanerógamas acuáticas (Intraspecific variations of the assimilating pigments in aquatic Chlorophyceae and phanerogams). En

Gives a few data on pigment analysis of uni-algal culture of freshwater green algae and of benthic marine flowering plants, incl. data on freshwater spp. for the purposes of comparison. No turbid extracts were used and computations in terms of pigments were made.

MF

**Mattisson, A. G. M.** (1961)

8-02226

*Ark. Zool.*, 13 (6) : 545-52

Flavins in some types of invertebrate muscles

Estimates of flavins in muscle tissues from invertebrates of different taxonomic groups and with marked differences in their oxidative metabolism.

MF

**Tabb, D. C.** (1962)

8-02227

*Proc. Gulf Caribb. Fish. Inst.*, 14 (1961) : 109-10

The ivory barnacle, *Balanus eburneus*, as a biological indicator in brackish waters of South Florida

Abstr. only.

MF

**Velasquez, G. T.** (1962)

8-02228

*Philipp. J. Sci.*, 91 (3) : 267-380

The blue-green algae of the Philippines

Work incl. all known specimens of Myxophyceae in Philippines, which number 162 spp. and 3 forms belonging to 33 genera and 8 families. Most specimens re-examined deposited in the Cryptogamic Herbarium of the Chicago Natural History Museum since before World War 2. There is also incl. assemblage of materials mostly collected by former botanists who visited the Philippines, and deposited in the US National Museum, New York Botanical Garden, and Herbarium of the University of California.

- F  
8-02229
- Hoffman, L. R.** (1961)  
Thesis, Univ. of Texas, 224 p.  
Studies of the morphology, cytology and reproduction of *Oedogonium* and *Oedocladium*  
DA 22 (9) : 2956.
- F  
8-02230
- Cooke, H. G.** (1962)  
Thesis, Univ. of Wisconsin, 159 p.  
The ecology, life-histories and systematics of the tendipedid (chironomid) midges of the vicinity of Madison, Wisconsin  
DA 22 (9) : 3302.
- F  
8-02231
- Satir, P. G.** (1961)  
Thesis, Rockefeller Inst., USA, 194 p.  
The mechanism of ciliary motion; a correlation of morphological and physiological aspects of ciliary beat of the gill epithelium of the freshwater mussel, *Elliptio complanatus* (Solander)  
DA 22 (9) : 3309.
- F  
8-02232
- Hynes, H. B., T. R. Williams & W. E. Kershaw** (1961)\*  
*Ann. trop. Med. Parasit.*, 55 : 197-201  
Freshwater crabs and *Simulium neavei* in East Africa—1. Preliminary observations made on the slopes of Mount Elgon in December 1961 and January 1961
- F  
8-02233
- Zabka, G. G. & W. R. Lazo** (1962)  
*Amer. J. Bot.*, 49 (2) : 146-8  
Reciprocal transfer of materials between algal cells and myxomycete plasmodia in intimate association  
Pure cultures of *Fuligo cinerea*, a myxomycete, and *Chlorella xanthella*, a green alga, were separately permitted to accumulate sodium radiophosphate from an agar medium and come into full association with non-radioactive cultures of the other organism.
- F  
8-02234
- Machlis, L.** (1962)  
*Amer. J. Bot.*, 49 (2) : 171-77  
The nutrition of certain species of the green alga *Oedogonium*
- F  
8-02235
- Singh, R. N.** (1962)  
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Ten thousand tiny turtle tags

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 Observations on the food habits of juvenile white sturgeon
- Describes stomach and esophageal contents of *Acipenser transmontanus* from Old River, California.
- Delisle, G. E.** (1962) MF  
8-02414  
*Calif. Fish Game*, 48 (1) : 77-8  
 Water velocities tolerated by spawning kokanee salmon
- Describes observations made on spawning *Oncorhynchus nerka kennerlyii* in California with respect to depth and water velocities.

# AQUATIC STOCKS

**Herald, E. S.** (1961) MF  
8-02415  
New York, Doubleday and Co., Inc., 304 p.  
Living fishes of the world

Account of habits, range, feeding and life cycles of marine and freshwater fish; with notes on their economic value. Incl. coloured and black-and-white photographs of every sp. dealt with. Appends an index of vernacular and scientific names of fishes.

**Larkin, P. A. & K. V. Ayyangar** (1961) MF  
8-02416  
*Proc. Alask. sci. Conf.*, (11) : 103-24  
Application of the Parker equation to growth of aquatic organisms

Ci 28-3949BO, 59-7081 and 61-01531. Recapitulation and application of 61-01531 to data for growth of *Eopsetta*, *Salmo clarki*, *S. gairdneri*, and *Placopecten*, from N. Pacific, NW Atlantic and British Columbia lakes.

**Backhouse, D.** (1962) MF  
8-02417  
*New Scient.*, 13 (282) : 51  
Grey seals, salmon, commerce and politics  
Re 59-7424.

**Tarlo, L. B.** (1962) MF  
8-02418  
*New Scient.*, 14 (284) : 151-3  
The earliest vertebrates

Reasons for believing that ostracoderms inhabited seawater and not freshwater, are summarized. New geological evidence suggests that, as does the eel, their descendants spent only their larval life in the sea, then migrated to colonize other aquatic environments.

**Anon.** (1962) MF  
8-02419  
*New Scient.*, 14 (292) : 659  
How the ray avoids fresh and brackish water

Ampullae of Lorenzini are sensitive to extremely small electric currents and to changes in salinity.

**International Commission on Zoological Nomenclature** (1962) MF  
8-02420  
*Bull. zool. Nom.*, 19 (4) : 193-256

Co 62-00599.

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*Z. Zellforsch.*, 55 : 849-912  
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8-02423  
*Acta endocr. Suppl., Copenh.*, 34 (50) : 201-6  
The comparative and ecological histophysiology of the pituitary gland of some Chondrostei and Teleostei with reference to the gonadotrophic function of this organ
- Sokol, H. W.** (1961)\* MF  
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*J. Morph.*, 109 : 219-35  
Cytological changes in the teleost pituitary gland associated with the reproductive cycle
- Olivereau, M.** (1962)\* MF  
8-02425  
*Biol. et Méd.*, 51 : 172-9  
(Adenohypophysial cytology in Agnatha, fish and Amphibia). *Fr*
- Levy, B. M.** (1962)\* MF  
8-02426  
*Cancer Res.*, 22 : 441-2  
Experimental induction of tumor-like lesions of the notochord of fish
- Praznikova, N. V.** (1962)\* MF  
8-02427  
*Trud. Inst. Fiziol. Pavlov*, 273-83  
(Retarding conditioned reflexes in fish). *Ru*
- Schmidt, P. J. & D. R. Idler** (1962)\* MF  
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*Gen. comp. Endocr.*, 2 : 204-14  
Steroid hormones in the plasma of salmon at various states of maturation
- Finkel'shtein, E. A.** (1962)\* MF  
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*Usp. sovrem. Biol.*, 53 : 208-36  
(On some regularities in the distribution of neoplasms in the class of fish). *Ru*



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- Palva, I. (1962)\***  
*Acta med. scand.*, 171 (Suppl. 374) : 1-86  
 Vitamin B12 deficiency in fish tapeworm carriers. A clinical and laboratory study
- MF  
8-02431
- Moss, M. L. (1962)\***  
*Acta anat.*, 48 : 46-60  
 Studies of the acellular bone of teleost fish—2. Response to fracture under normal and acalcermic conditions  
 Co 8-01471.
- MF  
8-02432
- Malashina, S. G. (1962)\***  
*Gig. i Sanit.*, 27 : 91-4  
 (Accumulation and distribution of ruthenium in some aqueous organisms).  
*Ru*
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- Anon. (1962)**  
*New Scient.*, 15 (301) : 420  
 Trends and discoveries—Fatty degeneration in salmon  
 Ci 61-288me. Some fish have very high normal blood cholesterol level. S. F. Thomas (Philadelphia) now describes severe atheroma as an invariable concomitant of physiological and pathological changes consequent to maturation and spawning in Pacific salmon.
- MF  
8-02434
- Dees, L. T. (1961)**  
*Fish. Leaflet, Wash.*, (526) : 8 p.  
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 Spp., life history, behaviour, decline, protection, capture, value, commodity preparation, culture, North American, Asiatic and European spp., relatives.
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8-02435
- Isaev, A. I. (Ricker, W. E., Transl.) (1961)**  
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 Acclimatization of Pacific salmon in the Barents and White Seas  
 En 62-02701. Transportation of eggs and release of fingerlings of *Oncorhynchus gorbuscha* and *O. keta*.
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8-02436
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*Bull. zool. Nom.*, 19 (1) : 64 p.  
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*Bull. zool. Nom.*, 19 (2) : 65-128  
 Co 62-00599.

**Myers, B. J. & R. E. Kuntz (1962)**MF  
8-02438*Canad. J. Zool.*, 40 (2) : 135-6Nematode parasites from vertebrates taken on Lan Yü, Formosa—2.  
Nematodes from fish, amphibians, reptiles, birds

Records 7 spp. of nematodes, none of which are new, and a number of immature forms.

**Kinne, O. & E. M. Kinne (1962)**MF  
8-02439*Canad. J. Zool.*, 40 (2) : 231-53

Rates of development in embryos of a cyprinodont fish exposed to different temperature-salinity-oxygen combinations

Effects of different temperature-salinity-oxygen combinations in the euryplastic teleost, *Cyprinodon macularius*.**Ali, M. A. (1962)**MF  
8-02440*Canad. J. Zool.*, 40 (4) : 561-70Influence of light intensity on retinal adaptation in Atlantic salmon (*Salmo salar*) yearlings

Results of experiments on light and dark adaptation.

**Audouin, J. (1962)**MF  
8-02441*Rev. Trav. Inst. Pêches marit.*, 26 (1) : 105-26La daurade de l'étang de Thau (*Chrysophrys aurata* (Linné) ) (The gilt-head of the Thau Lagoon, *Chrysophrys aurata* (Linnaeus) )

Age, growth, body proportions, migrations, resistance to salinity and temperature variations.

**Minakowski, W. (1962)**MF  
8-02442*Zesz. nauk. wyższ. Szk. roln. Olsztyn*, 12 (1) : 41-8Aminokwasy podczas rozwoju ikry szczupaka (*Esox lucius* L.) (Amino acids during the development of pike, *Esox lucius* L.). *Pl En Ru***Minakowski, W. & Z. Nowicka (1962)**MF  
8-02443*Zesz. nauk. wyższ. Szk. roln. Olsztyn*, 12 (1) : 49-54Ogólna zawartość kwasu L-askorbinowego podczas rozwoju embrionalnego ikry szczupaka pospolitego (*Esox lucius* L.) (Total content of L-ascorbic acid during the embryonal development of the common pike, *Esox lucius* L., eggs). *Pl En Ru*

Unfertilized eggs contain L-ascorbid acid; L-ascorbic acid plays a part in the metabolism of a developing ovum; during the embryonal development synthesis of L-ascorbic acid can be observed.

- MF  
8-02444
- Draganik, B. (1962)**  
*Zesz. nauk. wyższ. Szk. roln. Olsztyn*, 13 (1) : 141-67  
 Odżywianie się węgorza w jeziorach mazurskich (The feed of eels in Masurian lakes). Pl En Ru
- MF  
8-02445
- Loosanoff, V. L. (1962)**  
*Proc. Gulf Caribb. Fish. Inst.*, 14 (1961) : 80-95  
 Effects of turbidity on some larval and adult bivalves
- MF  
8-02446
- Saila, S. B. (1962)**  
*Proc. Gulf Caribb. Fish. Inst.*, 14 (1961) : 95-109  
 The contribution of estuaries to the offshore winter flounder fishery in Rhode Island
- MF  
8-02447
- Mansueti, R. J. (1962)**  
*Proc. Gulf Caribb. Fish. Inst.*, 14 (1961) : 110-36  
 Effects of civilization on striped bass and other estuarine biota in Chesapeake Bay and tributaries
- MF  
8-02448
- Sinnhuber, R. O., et al. (1961)**  
*Res. Briefs*, 8 (1) : 53-60  
 Sixth progress report on salmon diet experiments
- SFA 7 (2) 4900. Identical diets fed to three groups of fish at two different locations gave comparable results although in nutritional work spring chinook salmon appear to be a more critical test animal than silver salmon. Various livers tested from sheep, horses and yellowfin tuna at a 10 per cent level in the Oregon diet compared favorably with beef liver. Turbot meal as a partial replacement for casein was not satisfactory.
- MF  
8-02449
- Law, D. K. et al. (1961)**  
*Res. Briefs*, 8 (1) : 62-70  
 Seventh progress report on salmon diet experiments
- Co 8-02448. SFA 7 (2) 4901. Seven animal protein meals were utilized as partial component replacements in the Oregon test diet to evaluate the growth response of silver salmon. These were: drum-dried whale, Dover sole, fillet scrap, and skate wing; low-temperature-dried yellowfin tuna scrap; and commercial meat, herring, and yellowfin tuna. Three production-type diets were employed to evaluate ground whole turbot, hake, and beef liver in combination with dry meals to form a moist pelleted diet.
- MF  
8-02450
- Höglund, L. B. (1961)**  
*Rep. Inst. Freshw. Res. Drottning.*, (43) : 147 p.  
 The reactions of fish in concentration gradients
- SFA 7 (2) 4958. General review of subject.

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8-02451  
*Medd. Grønland*, 159 (8) : 7-14  
Distribution of the salmon *Salmo salar* L. in Greenland  
SFA 7 (2) 4959.
- Nielsen, J.** (1961) MF  
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*Medd. Grønland*, 159 (8) : 15-23  
Spawning and migration of the Greenland salmon *Salmo salar* L.  
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8-02453  
*Medd. Grønland*, 159 (8) : 24-48  
Preliminary results of tagging experiments with char *Salvelinus alpinus* (L.) in Greenland  
SFA 7 (2) 4961.
- Nielsen, J.** (1961) MF  
8-02454  
*Medd. Grønland*, 159 (8) : 49-73  
Age and growth of the freshwater stage of anadromous char *Salvelinus alpinus* (L.)  
SFA 7 (2) 4962.
- Farona, M. F., T. R. Sweet & W. M. MacNevin** (1962) MF  
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*Arch. Biochem.*, 98 (2) : 245-8  
A chemical investigation of the lamprey eel venom  
Presence of a lipid, a carbohydrate, and a protein were shown in the lamprey eel venom from Lake Huron.
- Kaplan, M. T.** (1961) F  
8-02456  
Thesis, Univ. of Southern California, 94 p.  
Studies on the effect of filtrates of *Staphylococcus* cultures on goldfish  
DA 22 (9) : 2946. Investigation to determine if goldfish could be used for the detection, assay, or study of exotoxins of staphylococcal culture filtrates.
- Allison, R.** (1961) F  
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Thesis, Louisiana St. Univ., 117 p.  
Monogenetic trematodes of Alabama freshwater fishes  
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- Belkin, D. A.** (1961) F  
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Thesis, Univ. of Florida, 41 p.

Anaerobic mechanisms in the diving of the loggerhead musk turtle, *Sternotherus minor*

DA 22 (9) : 3300.

- Alabaster, J. S. & K. G. Robertson** (1961) F  
8-02459  
*Anim. Behav.*, 9 (3-4) : 187-92

The effect of diurnal changes in temperature, dissolved oxygen and illumination on the behaviour of roach (*Rutilus rutilus* (L.)), bream (*Abramis brama* (L.)) and perch (*Perca fluviatilis* (L.))

Describes and analyses results of experiments on movements of fish in a long tank under controlled conditions.

- Mitchell, R.** (1961) F  
8-02460  
*Anim. Behav.*, 9 (3-4) : 220-4

Behaviour of the larvae of *Arrenurus fissicornis* Marshall, a water mite parasitic on dragonflies

Reports and analyses field studies in Michigan.

- Jubb, R. A.** (1961) F  
8-02461  
*Ann. Cape prov. Mus.*, 1 : 15-48

The freshwater eels (*Anguilla* spp.) of southern Africa. An introduction to their identification and biology

5 spp.—*Anguilla marmorata* Quoy & Gaimard, 1824, *A. nebulosa labiata* Peters, 1852, *A. mossambica* Peters, 1852, *A. obscura* Gunther, 1871, and *A. bicolor bicolor* McClelland, 1844—are described and a simplified key provided for their identification. Distribution of the spp., length-weight curve, breeding place. Economic exploitation of eel populations is discussed briefly, whilst an annual supply of elvers from sea is a permanent natural resource, exploitation of eel populations from these is related to permanency and availability of inland waters.

- Rowell, J. H., Jr.** (1961) F  
8-02462  
*Int. Fish. adm. Rep., Calif.*, (61-17) : 15 p.

The 1960 fish rescue report for region

Crews rescued 558,607 steelhead rainbow trout during 1960.

- Churchill, A. J.** (1962) F  
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*New Scient.*, 13 (279) : 711

Vanishing stripes on fish

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8-02464  
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Vanishing stripes on fish

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*New Scient.*, 13 (281) : 831  
Vanishing stripes on fish

Le 8-02464.

- Hillaby, J.** (1962) F  
8-02466  
*New Scient.*, 14 (291) : 588-90  
Harvesting the hippo

Plague of hippopotamus in Uganda is causing erosion by overgrazing and there is scheme to market surplus for meat.

- Sterba, G.** (1961)\* F  
8-02467  
*Z. Zellforsch.*, 55 : 763-89  
(Fluorescence microscope studies on neurosecretion in the river lamprey, *Lampetra planeri* Bloch). *De*

- Munshi, J. S.** (1961)\* F  
8-02468  
*J. Morph.*, 109 : 115-39  
The accessory respiratory organs of *Clarias batrachus* (Linn.)

- Gilinskii, E. Ia.** (1960)\* F  
8-02469  
*Trud. Inst. Fiziol. Pavlov*, 9 : 444-7  
(The receptor apparatus of the stomach of *Salmo trutta*). *Ru*

- Milokhin, A. A.** (1960)\* F  
8-02470  
*Trud. Inst. Fiziol. Pavlov*, 9 : 448-57  
(On the nature of adaptive changes in the neural apparatus of the digestive system in carps, family Cyprinidae, fed various foods—An experiment with the ecological approach to the morphological study of the nervous system). *Ru*

- Sanders, B. G. & J. E. Wright** (1962)\* F  
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*Ann. N.Y. Acad. Sci.*, 97 : 116-30  
Immunogenetic studies in two trout species of the genus *Salmo*

- Flock, A. & J. Wersall** (1962)\* F  
8-02472  
*J. cell. Biol.*, 13 : 337-43  
Synaptic structures in the lateral line canal organ of the teleost fish *Lota vulgaris*

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8-02473  
*Vop. Pitan.*, 21 : 83-4  
 (Content of ascorbic acid in some types of fish in the Ob basin). *Ru*
- Inglis, W. G. (1962)\*** F  
8-02474  
*J. Helminth.*, 36 : 45-50  
*ICHTHYOURIS* ro gen. et sp. nov. (Nematoda): an oxyurid from a fresh-water fish
- Khalil, L. F. (1962)\*** F  
8-02475  
*J. Helminth.*, 36 : 51-8  
 On two new nematodes from freshwater fishes in the Sudan of the genus *Spironoura* Leidy, 1856 and the relation of *Spironoura* to the genus *Velariocephalus* Singh, 1958
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8-02476  
*J. Parasit.*, 48 (2) : 291-2  
*Nitzschia quadritestis* sp. n. (Monogenea: Capsalidae) from the Columbia River sturgeon  
 HA 32 (1) 731. Described from the gills of *Acipenser transmontanus* from the brackish-water region, Oregon (U.S.A.).
- Hagiwara, S., K. Kusano & K. Negishi (1962)\*** F  
8-02477  
*J. Neurophysiol.*, 25 : 430-49  
 Physiological properties of electro-receptors of some gymnotids
- Massmann, W. H. & A. L. Pacheco (1962)** F  
8-02478  
*Contr. Va Fish. Lab.*, 1960-61 (91)  
 Disappearance of young Atlantic croakers from the York River, Virginia  
 CR 61-02029.
- U.S. Department of the Interior (1962)** F  
8-02479  
*News Rel. U.S. Dep. Int.*, August, 1 p.  
 Interior Department sets lands aside for new national fish hatchery in Utah  
 Announcement of plans for trout culture and restocking in upper Colorado River—Jones Hole.
- Miles, C. (1961)** F  
8-02480  
*Proc. Gulf Caribb. Fish. Inst.*, 13 (1960) : 156-62  
 A world-wide approach to fish culture improvement  
 Proposal of world effort to investigate possible culture of imperfectly known spp.

**Dees, L. T. (1961)**F  
8-02481*Fish. Leaflet, Wash.*, (525) : 5 p.The mosquitofish, *Gambusia affinis*

Range, foreign introductions, habitat, life history, enemies, culture, dealers.

**Weitzman, S. H. (1962)**F  
8-02482*Stanf. ichthyol. Bull.*, 8 (1) : 77 p.The osteology of *Brycon meeki*, a generalized characid fish, with an osteological definition of the family**Timmermans, J. A. (1961)**F  
8-02483*Trav. Sta. Rech. Groenendaal*, D (33) : 51 p.Infections par *Pseudomonas* chez les poissons d'eau douce (Infection by *Pseudomonas* in freshwater fishes). *Fr Ne*

Pathological agents, symptoms, evolution of contamination; means of control.

**Meisner, H. M. & C. P. Hickman, Jr. (1962)**F  
8-02484*Canad. J. Zool.*, 40 (2) : 127-30Effect of temperature and photoperiod on the serum proteins of the rainbow trout, *Salmo gairdneri*

Serum of 1- and 2-year old rainbow trout, acclimated at least 43 days to four conditions of temperature and daylength—16°-8L (hours daily photoperiod), 16°-16L, 8°-8L, and 8°-16L—was examined by paper electrophoresis. The albumin/globulin ratio was significantly greater in trout acclimated to 8°C—pooled photoperiod—than in those acclimated to 16°C—pooled photoperiod. Photoperiod had no significant effect on the serum protein pattern.

**Farley, J. (1962)**F  
8-02485*Canad. J. Zool.*, 40 (2) : 131-3*Schistosomatum douthitti* (Cort, 1914) Price, 1931 in Manitoba

Cercariae of *S. douthitti* have been found in two lakes in Manitoba, in which cases of schistosoma dermatitis occurred. One adult female *S. douthitti* was recovered from a naturally infected meadow-vole, *Microtus pennsylvanicus*. This is the first report of the parasite in Manitoba. *Cercaria elvae* was also widespread throughout the southern region of the province.



- de Wit, J. J. Duyvené** (1962) F  
8-02486  
*Canad. J. Zool.*, 40 (2) : 255-9

Hybridization experiments in acheilognathine fishes (Cyprinidae, Teleostei)  
 —The hybrids between female *Acheilognathus lanceolatus* and *Rhodeus amarus*  
 and male *Acheilognathus himantegus*

Hybridization between *A. lanceolatus* from Japan  $\times$  *A. himantegus* from  
 Taiwan and *R. amarus* from Holland  $\times$  *A. himantegus* has been reported.  
 From both combinations, hybrids have been obtained with the aid of artificial  
 insemination. A diagram is presented showing the gametic compatibility  
 between *A. himantegus* and three other allopatric bitterling spp.

- Hochachka, P. W. & F. R. Hayes** (1962) F  
8-02487  
*Canad. J. Zool.*, 40 (2) : 261-70

The effect of temperature acclimation on pathways of glucose metabolism  
 in the trout

*Salvelinus fontinalis*.

- Lindsey, C. C.** (1962) F  
8-02488  
*Canad. J. Zool.*, 40 (2) : 271-312

Experimental study of meristic variation in a population of threespine  
 sticklebacks, *Gasterosteus aculeatus*

Eggs of 21 pairs of wild sticklebacks from Hobson's Brook near Cambridge,  
 England, were reared under various controlled temperatures and salinities.  
 253 young were examined for counts of abdominal and caudal vertebrae,  
 dorsal and anal spines and soft fin rays and basal supports, segmented and  
 simple caudal rays, and pectoral rays. Lateral plates were counted on 95  
 young.

- Magnuson, J. J.** (1962) F  
8-02489  
*Canad. J. Zool.*, 40 (2) : 313-63

An analysis of aggressive behavior, growth and competition for food and  
 space in medaka (*Oryzias latipes* (Pisces, Cyprinodontidae) )

The role and consequences of aggressive behavior in competition for food  
 and space were studied among laboratory populations of juvenile medaka.  
 Growth rate, used to measure the success of an individual fish in different  
 competitive situations, was followed for 648 fish in populations of 1, 2, 4, 8,  
 or 16 fish in 1-, 4-, or 8-liter baskets.

- Sale, P. F.** (1962) F  
8-02490  
*Canad. J. Zool.*, 40 (2) : 367-9

A note on the lethal temperature of the aurora trout, *Salvelinus*  
*timagamiensis*

**Myers, B. J., R. E. Kuntz & W. H. Wells** (1962)

F  
8-02491

*Canad. J. Zool.*, 40 (4) : 531-8

Helminth parasites of reptiles, birds, and mammals in Egypt—7. Check list of nematodes collected from 1948 to 1955

Nematodes identified from vertebrates collected in Egypt by the US Naval Medical Research Unit no. 3 are listed under hosts.

**Henderson, N. E.** (1962)

F  
8-02492

*Canad. J. Zool.*, 40 (4) : 631-41

The annual cycle in the testis of the eastern brook trout, *Salvelinus fontinalis* (Mitchill)

The annual cycle can be divided into six stages. A histological description is given of each of these stages and of the structure of the gonads.

**Meisner, H. M.** (1962)

F  
8-02493

*Canad. J. Zool.*, 40 (4) : 643-53

The effect of propylthiouracil on the oxygen consumption and iodine metabolism of the frog, *Rana pipiens*, in winter

**Morris, R. W.** (1962)

F  
8-02494

*Amer. Nat.*, 96 (886) : 35-50

Body size and temperature sensitivity in the cychlid fish, *Aequidens portalegrensis* (Hensel)

Considers the relationship that may exist between size and acutely measured  $Q_{10}$  in a single fish sp. and attempts elucidation of some of the factors that appear to affect the relationship.

**Qadri, S. S.** (1962)

F  
8-02495

*Proc. zool. Soc. Lond.*, 139 (2) : 329-35

New Myxosporidia from some British freshwater fishes

Account is given of morphology, systematic position and differential diagnosis of *Myxidium scardini* sp. n. in gall bladder of *Scardinius erythrocephalus* from lake Windermere, Westmorland, England, *Zschokkella cyprini* sp. n. of *Cyprinus carpio* from gravel pit near Shenley, Hertfordshire and *Chloromyxum phoxini* sp. n., in bile of small *Phoxinus phoxinus* from Lake Windermere.

**Dehadrai, P. V.** (1962)

F  
8-02496

*Proc. zool. Soc. Lond.*, 139 (2) : 341-57

Respiratory function of the swimbladder of *Notopterus* (Lacépède)

Aspects of anatomy, histology and physiology of swimbladder studied, with special reference to its behaviour in aerial respiration. Frequency and extent of aquatic and aerial respiration in *Notopterus* under different conditions determined. Comparative discussion concerning air-breathing in *Amia*, *Lepidosteus*, *Erythrinus*, and *Phractolaemus*.

- Olaniyan, C. I. O.** (1961) F  
8-02497  
*J. W. Afr. Sci. Ass.*, 7 (1) : 74-92

On the introduction of the common carp, *Cyprinus carpio* L., into Nigerian waters and its possible effect on the hydrography of the region

Introduced in Oct. 1954 for stocking artificial ponds constructed at Panyam. Investigations to ascertain whether carp alters physical properties of the water to a greater extent than the indigenous spp. of fishes and also whether it is likely to have serious deleterious effect on the freshwater plankton. Carried out in selected ponds at Panyam and in two paddocks, being disused tin-mining pits full of water, at Bukuru.

- Verheijen, F. J.** (1962) F  
8-02498  
*Naturwissenschaften*, 49 (15) : 356

Alarm substance and intra-specific predation in cyprinids

Ci 1941 Berwein, M. Observations in aquarium of *Semotilus atromaculatus* Mitchill ranging from 4 to 12 cm in length. This is North American cyprinid in which occurrence of alarm substance has recently been demonstrated. Hypothesis that alarm substance protects cyprinid fry against predation by more or less adult fish was based upon observation of Berwein that *Phoxinus laevis* Agassiz were frightened after predation upon minnows 1.3 to 1.6 cm long.

- Lewis, J. B.** (1962) F  
8-02499  
*Proc. Gulf Caribb. Fish. Inst.*, 14 (1961) : 199-201

Preliminary experiments on the rearing of the fresh water shrimp, *Macrobrachium carcinus* (L.)

- Fishelson, L.** (1962) F  
8-02500  
*Fish. Bull., Haifa*, 4 (2 (32)) : 14-9

(Hybrids of two species of fishes of the genus *Tilapia* (Cichlidae, Teleostei)).  
Iw En

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Publication of research findings has so increased in volume that scientist finds it hard to keep informed about developments in his field. Author urges that burden of reading should be lightened by using other techniques of communication; in particular, he favours attendance at frequent and regular international seminars by scientists of kindred interests.

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The extinction of a bacterial colony by phages: a branching process with deterministic removals

Discusses two simple branching models. Treatment by discrete time Markov chain methods does not lead to simple explicit solutions. For one of models a generating function method yields direct solutions for probabilities of first extinction, as well as probability of  $i$  survivals. Concludes with extensions of results to case of unequal and random time intervals.

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 [Review]

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 Estimation for two exponential models

Abstr. only. Paper presented at the annual meeting of the Biometric Society ENAR held jointly with the American Statistical Association and the Institute of Mathematical Statistics in New York City, Dec. 1961. Tracer experiments yielding models  $A \exp(-\alpha t)$  and  $A \exp(-\alpha t) + (1-A) \exp(-\beta t)$  are discussed. For latter iterative weighted least squares techniques often fail to converge to admissible estimates or converge very slowly. A procedure which combines methods of steepest descent and weighted least squares is investigated and its convergence is compared with each method separately on available experimental data. This procedure is further evaluated by Monte Carlo techniques.





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- Ramsey, W. L. (1962)** M  
 8-03104  
*Limnol. Oceanogr.*, 7 (1) : 1-7  
 Bubble growth from dissolved oxygen near the sea surface

Calculation shows that high degree oxygen-supersaturation necessary to  
 cause growth of existing invisible bubbles at depths exceeding a few feet;  
 data on distribution of dissolved oxygen in shallow water off San Diego,  
 California, presented and related to possible growth of bubbles.



**Higaki, S. & H. Zeitlin** (1962)

M  
8-03105

*Limnol & Oceanogr.*, 7 (1) : 103

Notes and comment—Nitrate in Hawaiian waters

In 1956 station near Koko Head, Oahu, established by Honolulu Biological Laboratory of the US Bureau of Commercial Fisheries to provide information regarding the circulating water system of the Hawaiian Islands. In 1959 as part of investigation on chemical characteristics of waters, method of Mullin & Riley (1955) was applied for determination of nitrate.

**Bruyevich, S. V.** (1962)

M  
8-03106

M. 6315

Standardization of methods of chemical research and methods of expressing sea-water analyses.

*En* 59-2922. Available from National Lending Library for Science and Technology, Boston Spa, Yorkshire.

**Maksimov, I. V.** (1961)\*

M  
8-03107

*Okeanologiya*, (2) : 206-12

(The long period cycle of solar activity and the North Atlantic current).

*Ru*

**Maksimov, I. V.** (1962)\*

M  
8-03108

M. 3872

The long period cycle of solar activity and the North Atlantic current

*En* 8-03107. Available from the National Lending Library for Science and Technology, Boston Spa, Yorkshire.

**Sysoiev, N. N.** (1961)\*

M  
8-03109

*Okeanologiya*, 1 (6) : 1079-82

(New auto-recorders for anchored buoy stations). *Ru*

**Sysoyev, N. N.** (1962)\*

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8-03110

M. 6310

New auto-recorders for anchored buoy stations

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**Rakestraw, N. W. et al. (Ed.) (1960)**

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8-03111

Berkeley, Univ. Calif. Press, 508 p.

Oceanic observations of the Pacific 1950

Co 61-04998. First volume of projected series for publication of data collected in Pacific Ocean and adjacent seas by cooperating agencies. These are Scripps Institution of Oceanography of the University of California, La Jolla, California; Department of Oceanography of the Univ. of Washington, Seattle, Washington; US Navy Electronics Laboratory, San Diego, California; Pacific Oceanic Fishery Investigations, USFWS—now Biological Laboratory of the Bureau of Commercial Fisheries—, Honolulu, Territory of Hawaii; Pacific Oceanographic Group of the Fisheries Research Board of Canada, Nanaimo, British Columbia; South Pacific Fishery Investigations, USFWS—now Biological Laboratory of the Bureau of Commercial Fisheries—, La Jolla, California. It is hoped that other agencies engaged in oceanographic studies in the Pacific area will utilize this serial. For each station, temperature, salinity, oxygen, phosphate, or other measured concentrations are tabulated at observed and at standard depths. Computed values of density, specific volume anomaly and geopotential anomaly are also tabulated. Numbers of bathythermograph observations during 1941 to 1950, and in 1950, shown by five-degree squares. Positions of serial observations shown on appropriate charts, and information concerning cruises on which observations were made summarized in table.

**Anon. (1962)**

M  
8-03112

*Vickers Mag.*, winter 1961–62: unpag. Repr. 1 p.

How salt is the sea?

Note on ICES discussion, salinometer developments, work of H.M.S. 'Scott'.

**Carruthers, J. N. (1962)**

M  
8-03113

*Vickers Mag.*, winter 1961–62: unpag. Repr. 6 p.

The salty ocean

Summary article on chemical composition of sea water and its determination, with reference to ICES discussions, and recent work by Cox.

**P.-A. (1962)**

M  
8-03114

*Industr. pesq., Vigo*, 36 (845): 246

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Re 8-03076.

**AERE/UK. Production Group (1962?)\***

M  
8-03115

London, H.M.S.O., 312 (W)

Analytical method for the determination of ruthenium-103, ruthenium-106, caesium-137, zirconium/niobium-95 and cerium-144 in shore sand and sea silt samples

- M  
8-03116
- Bogdanov, K. T. & V. P. Nefed'ev** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (5) : 1034-7  
 Novye kotidal'nye karty sutochnykh prilivnykh voln  $K_1$  i  $O_1$  Avstral'-Aziatskikh morei (New cotidal charts of diurnal tidal waves ( $K_1$  and  $O_1$ ) in Australo-Asiatic seas)
- M  
8-03117
- Klenova, M. V., V. M. Lavrov & V. K. Nikolaeva** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (5) : 1153-5  
 Raspredelenie vzvesi v Atlanticheskom okeane v svyazi s rel'efom dna (The distribution of suspension in the Atlantic as connected with its bottom topography)
- M  
8-03118
- Kuz'mina, A. I.** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (5) : 1156-9  
 Nekotorye dannye o vessenem fitoplanktone Severnoi Atlantiki (po materialam 2 reisa nauchnoissledovatel'skogo sudna 'Lomonosov', 1958 g.) (Certain data on the vernal phytoplankton of the North Atlantic, from data of the 2nd voyage of the e.s. 'Lomonosov' in 1958)
- M  
8-03119
- Semerchan, A. A. & D. B. Balashov** (1962)  
*Dokl. Akad. Nauk SSSR*, 146 (3) : 592-5  
 Konstruirovaniye i ispytaniye konteinerov dlia geofizicheskikh issledovaniy na bol'shikh glubinakh okeana (Design and test of containers for geophysical investigations at great sea depths)
- M  
8-03120
- Mamaev, O. I.** (1962)  
*Dokl. Akad. Nauk SSSR*, 146 (2) : 347-9  
 T, S-krivyye i vertikal'naya ustoychivost' vod okeana (T, S-curves and the vertical stability of ocean waters)
- M  
8-03121
- Shuleikin, V. V.** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (4) : 781-4  
 Edinaia kharakteristika turbulentnoi v'язkosti dlia morskikh voln i techenii (A single characteristic of turbulent viscosity for sea waves and currents)
- M  
8-03122
- Voit, S. S.** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (1) : 93-6  
 Integrirovaniye uravnenii prilivov v odnom sluchae neustanovivshegosia dvizheniya (Integration of flood tide equations in a certain case of unsteady motion)
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8-03123
- Neprochnov, Iu. P.** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (2) : 438-40  
 Novye dannye o stroenii zemnoi kory pod dnom Indiiskogo okeana (Recent data on the structure of the earth crust underlying the bottom of the Indian Ocean)

- Emel'ianov, E. M. & V. D. Chumakov** (1962) M  
8-03124  
*Dokl. Akad. Nauk SSSR*, 143 (3) : 701-4  
 Nekotorye dannye po izucheniiu ilovykh vod Mramornogo i Sredizemnogo morei (Certain data contributing to the study of silt waters of the Sea of Marmara and the Mediterranean)
- Nekrasova, V. A. & V. N. Stepanov** (1962) M  
8-03125  
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 Tipy izmeneniia temperatury vody po vertikali v Mirovom okeane (Types of water temperature variation along the vertical in the world ocean)
- Vaux, D.** (1961) M  
8-03126  
*Fish. Newslett. Aust.*, 20 (11) : 19-20  
 Measurement of seawater temperature by fishermen  
 WFA 13 (3) : 5. Tuna, mackerels, etc.—exploration—eastern Pacific, Australia.
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 Theoretical considerations. Issued also as: *Contr. Inst. Mar. Res. Helsinki*.
- Byrne, J. V. & L. D. Kulm** (1962) MG  
8-03128  
*Limnol. & Oceanogr.*, 7 (1) : 106-8  
 Notes and comments—An inexpensive lightweight piston corer
- Rattray, M., Jr. & D. V. Hansen** (1962) MF  
8-03129  
*J. Mar. Res.*, 20 (2) : 121-33  
 A similarity solution for circulation in an estuary  
 Set of partial differential equations and boundary conditions written to describe flow and mixing in simple class of estuaries. Two sets of similarity transformations given which, with appropriate boundary conditions, reduce partial differential equations to pair of simultaneous ordinary differential equations. One set used to obtain physically realistic solution.
- Kachurin, L. G.** (1960)\* MF  
8-03130  
*Izv. Akad. Nauk SSSR (geofiz.)*, (10)  
 (Calculation of the supercooling of water beneath ice and the rate of growth of ice in waters with allowance for the actual temperature of the crystallization front). *Ru*



**Jeffries, H. P.** (1962)

MF  
8-03131

*Limnol. & Oceanogr.*, 7 (1) : 21-31

Environmental characteristics of Raritan Bay, a polluted estuary

Temperature, salinity, dissolved  $O_2$ ,  $PO_4$ -P, and  $NO_3$ -N in bay, N.J., determined over 16-month period. Combination of rich nutrient supplies arising from natural and domestic sources, plus a sluggish circulation, efficient nutrient regeneration mechanism, and scarcity of macroscopic algae combined to form an estuarine environment capable of supporting extremely dense plankton populations.

**U.K. Atomic Energy Authority, Production Group** (1961?)\*

MF  
8-03132

London, H.M.S.O., PG 155 (W)

Analytical methods for the determination of caesium-137, strontium-89 and 90 in rain, lake and sea water

**Bachmann, R. W.** (1962)

F  
8-03133

Thesis, Univ. of Michigan, 88 p.

An experimental study of the freshwater zinc cycle

DA 23 (1) : 358-9. Zinc is found in lakes in both solid and liquid phases. This study was designed to determine, quantitatively, some factors which influence this distribution. Zinc-65 was used as tracer to measure uptake by suspensions of alga *Golenkinia paucispina*, organic detritus, bottom sediments, and natural lake seston. Uptake curves were approximated by the Elovich equation. *Daphnia pulex* and *D. magna* accumulated only insignificant fractions of the zinc in the water and lost some of this upon being placed in a fresh medium. When oxidized sediments disturbed by burrowing nymphs of mayfly *Ephemera simulans*, zinc concentration approached a uniform distribution with depth in the sediments. Hypothetical outline of cycle is characterized by exchanges between dissolved zinc and suspended materials, rooted aquatic plants, and bottom sediments.

**Hoffman, D. A.** (1962)

F  
8-03134

Thesis, Colorado State Univ., 76 p.

The concentration and accumulation of radioactive phosphorus by an aquatic food chain

DA 23 (1) : 364-5. Food chain consisted of green algae, *Ankistrodesmus falcatus* var. *acicularis* (A. Br.) West; microcrustaceans, *Daphnia magna* Straus; and green sunfish, *Lepomis cyanellus* Rafinesque.

**Behnke, R. J.** (1962)

F  
8-03135

*Copeia*, (2) : 478-9

The Balkan lake Ohrid and its living world

Re 60-5293.

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*Polsk. Arch. Hydrobiol.*, 9 (22) : 9-18  
 Charakterystyka limnologiczna jeziora Hańcza (Limnological characteristic of Hańcza Lake). *Pl En Ru*
- Michalski, K. & T. Januszkiewicz** (1961) F  
8-03137  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 19-35  
 Typologiczna ocena lotoku Zagórskiego (Typological characteristic of the Zagórski Stream). *Pl En Ru*
- Stangenberg-Oporowska, K.** F  
8-03138  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 37-157  
 Studia nad chemizmem wód stawów karpowych w Miliczu (Studies on the chemical composition of water in carp ponds in Milicz). *Pl Ru De*
- Moraczewski, J.** (1961) F  
8-03139  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 159-73  
 Wpływ niskiego stanu wody na stopień zanieczyszczenia Wisły w Warszawie (The influence of the low water level on the pollution degree of the river Vistula in Warsaw). *Pl En Ru*
- Klimowicz, H.** (1961) F  
8-03140  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 195-202  
 Daily temperature variations in a small water pool in Cairo
- Chodorowski, A.** (1961) F  
8-03141  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 287-317  
 Niektóre cochy termiczne drobnych zbiorników Puszczy Kampinoskiej w okresie wiosennym (Some chemical and thermal properties of the small pools in the Kampinos Forest in the spring-time). *Pl En Ru*
- Edwards, R. W., M. Owens & J. W. Gibbs** (1961) F  
8-03142  
*J. Instn Wat. Engrs*, 15 (5) : 395-405  
 Estimates of surface aeration in two streams  
 Effect of cobalt concentration and temperature on rate of oxidation of sodium sulphite solution added to sewage effluent and river water studied. Exchange coefficients of two sections of river Pix containing about 50 per cent sewage effluent determined, and effect of drainage water on results discussed. Exchange coefficients of three sections of river Ivel, an unpolluted chalk stream, determined; proposed correction to established methods of calculation for effect of changing oxygen consumption of plants with varying oxygen concentrations outlined.

**Klein, L. (1962)**

London, Butterworths

River pollution 2: causes and effects

F

8-03143

Deals with causes of river pollution, nature of various types of pollution and their effects upon rivers. Fish conservation; problems of sewage and trade wastes.

**Pincus, H. J. (Ed.) (1962)**

London, Bailey Bros. & Swinfen Ltd.

Great Lakes basin

F

8-03144

Consists of fifteen of the eighteen papers comprising the Symposium on the Great Lakes Basin, held in Dec. 1959, under the aegis of the Geological Society of America. A paper on biological research has been added.

**Armitage, K. B. & H. B. House (1962)**

*Limnol. & Oceanogr.*, 7 (1) : 36-41

A limnological reconnaissance in the area of McMurdo Sound, Antarctica

F

8-03145

During Antarctic summer 1960-61, limnological data were collected from a series of melt-water ponds and permanently ice-covered lakes in area. No zooplankton was found in any lake, but Ciliata, Rotifera, and Nematoda, Turbellaria and Tardigrada were collected from littoral fauna of melt-water ponds and around edges of lakes Bonney and Vanda.

**Livingstone, D. A. & J. C. Boykin (1962)**

*Limnol. & Oceanogr.*, 7 (1) : 57-62

Vertical distribution of phosphorus in Linsley Pond mud

F

8-03146

Acid extraction, digestion, and water dilution experiments disclose presence of large quantities of phosphorus in basal third of the sedimentary section from Linsley Pond, Connecticut.

**Dutton, J. A. & R. A. Bryson (1962)**

*Limnol. & Oceanogr.*, 7 (1) : 80-97

Heat flux in lake Mendota

F

8-03147

Physical processes of heat transfer at lake's surface and internal heat flux are studied for the "average" lake Mendota and for 1958-59. Surface heat budget is determined quantitatively. Details of internal fluxes of heat supplied or lost at surface are discussed, with emphasis on the effects of wind stirring and hydrostatic stability. It is shown that well-known solution to Fourier's heat conduction equation suffices to describe many features of internal temperature range and heat flux when effective thermal diffusivity is introduced. Solution is further used to demonstrate that internal seiche along thermocline causing heat flow in bottom sediments may account for 40% of heat transfer to hypolimnion.

**USPHS (1962)***Radiol. Hlth Data*, 3 (8) : 263-310

Co 62-02446.

FG  
8-03148**Likens, G. E. & A. D. Hasler (1962)***Limnol. & Oceanogr.*, 7 (1) : 48-56Movements of radiosodium ( $\text{Na}_{24}$ ) within an ice-covered lakeFG  
8-03149

Replicated experiments conducted during January 1960 and 1961 in small lake in northwestern Wisconsin. Crushing device described for releasing radioactive solution in deep water. In addition a "portable" scintillation counting system was developed for measuring radioactivity within the lake.

**Goldman, C. R. (1962)***Limnol. & Oceanogr.*, 7 (1) : 99-101Notes and comments—A method of studying nutrient limiting factors *in situ* in water columns isolated by polyethylene filmFG  
8-03150

Ci 61-01699. To supplement *in situ*  $\text{C}^{14}$  bioassay techniques already described, several large cylinders constructed of translucent polyethylene film. To demonstrate in stratified waters of Castle Lake, California, that thermocline is effective barrier to mixing within open cylinder, and that thermal stratification is not greatly altered by encasement in polyethylene, temperature measurements made with a thermistor inside cylinder are compared with those of the lake.

## PLANKTON

**Guillard, R. R. L. & J. H. Ryther (1962)***Canad. J. Microbiol.*, 8 (2) : 229-39Studies of marine planktonic diatoms—1. *Cyclotella nana* Hustedt, and *Detonula confervacea* (Clève) Gran.M  
8-03151

Bacteria-free clones of *Cyclotella* isolated, 3 from estuarine localities, 1 from continental shelf waters, and 1 from the Sargasso Sea. *Detonula* isolated from Narragansett Bay. Morphology of all clones studied with light and electron microscopes. Vitamin  $\text{B}_{12}$  requirements. Growth affected by salinity.

**Dunbar, M. J. (1962)***J. Mar. Res.*, 20 (1) : 76-91The life cycle of *Sagitta elegans* in Arctic and subarctic seas, and the modifying effects of hydrographic differences in the environmentM  
8-03152

*S. e. arctica* of Canadian eastern Arctic waters has life span of two years. Breeding cycle is two-phase, or alternating, and population consists of two distinct groups breeding in different years. Spawning period is long. Hydrographic differences between Hudson Bay, Fox Channel, Ungava Bay and Frobisher Bay, are reflected in biology of *Sagitta*.



Grice, G. D. (1962)

M  
8-03153

*J. Mar. Res.*, 20 (1) : 97-109

Copepods collected by the nuclear submarine 'Seadragon' on a cruise to and from the North Pole, with remarks on their geographic distribution

Brief, non-detailed description is given of an automatic, multiple net plankton sampler used on cruise between N. Atlantic and Pacific Oceans. Copepods in 90 samples identified and relative abundance determined. Most frequently and widely occurring of 18 spp. were *Metridia longa*, *Calanus hyperboreus* and *C. glacialis*. *Pseudocalanus minutus*, found mostly in the Chukchi Sea region, was the most abundant. 6 spp. are recognized as cosmopolites and 12 as Arctic or cold water spp.; of the latter, one is endemic to Arctic and 5 are not known from Pacific.

Alvariño, A. (1962)

M  
8-03154

*Bull. Scripps Instn Oceanogr.*, 8 (1) : 50 p.

Two new Pacific chaetognaths—Their distribution and relationship to allied species

*Sagitta scrippsae* n. sp.: diagnosis, nervous system, stages of maturity, food, relations among the different spp. of chaetognaths, problems of systematics, pattern of distribution, vertical distribution, distribution of related spp. *Eukrohnia bathypelagica* n. sp.: diagnosis, taxonomic problems, distribution.

Cassie, V. (1961)

M  
8-03155

*Bot. mar.*, 2 (Suppl.) : 54 p.

Marine phytoplankton in New Zealand waters. Fr Es De

Taxonomy; ecology; general surface hydrological features; sampling localities; methods; spp. list; notes on individual spp.; regional significance of New Zealand phytoplankton; list of stations, table of spp. and occurrence. In samples collected between sea surface and 20 metres' depth off the New Zealand coastline in the period 1957 to 1959, 240 spp., incl. 198 phytoplankters, have been identified. 23 localities have been grouped according to (a) current and (b) environment.

Sukhanova, I. N. (1962)

M  
8-03156

*Dokl. Akad. Nauk SSSR*, 142 (5) : 1162-4

O tropicheskomo fitoplanktone Indiiskogo okeana (On tropical phytoplankton of the Indian Ocean, from fish-net data)

Hansen, P. G. & E. G. Barham (1962)

M  
8-03157

*Limnol. & Oceanogr.*, 7 (1) : 8-13

Resonant cavity measurements of the effects of "red water" plankton on the attenuation of underwater sound

During summer 1958, a "red water" bloom caused by the dinoflagellate, *Gonyaulax polyedra*, occurred off San Diego, California. Using resonant cavity instrumentation, high attenuations were measured at sea and repeated in laboratory with collected samples. Mechanism of sound absorption might be related to gaseous metabolic by-products of planktonic organisms.

- M  
8-03158
- Gunnerson, C. G. & K. O. Emery** (1962)  
*Limnol. & Oceanogr.*, 7 (1) : 14-20  
 Suspended sediment and plankton over San Pedro Basin, California

Distribution of sediment and plankton throughout upper 275 m observed on four cruises in 1957-58. Evidence of entrainment and subsequent sinking of plankton with suspended sediment suggests turbidity currents originating within upper 50 m on continental shelf.

- M  
8-03159
- Lacroix, G. & P. Morisset** (1962)  
*Cah. Inform. Sta. Biol. mar. Grande-Rivière*, (14), 33-9  
 Observations sur les migrations verticales de *Sagitta elegans* Verrill (Observations on the vertical migrations of *Sagitta elegans* Verrill)

Observations in 1957 over two 24-hour periods in Grande-Rivière region, Quebec.

- M  
8-03160
- Silva, E. De Sousa e** (1962)  
*Notas Estud. Inst. Biol. marit.*, (24) : 75-100  
 Some observations on marine dinoflagellate cultures—2. *Glenodinium foliaceum* Stein and *Goniaulax diacantha* (Meunier) Schiller. Fr Es De

Co 8-03203. Considers morphological aspects observed in the development of the spp.

- M  
8-03161
- Sushchenia, L. M.** (1962)  
*Dokl. Akad. Nauk SSSR*, 143 (5) : 1205-7  
 Kolichestvennyye dannye i pitanii i balans energii *Artemia salina* (L.) (Quantitative data on the nutrition and energy balance in *Artemia salina* (L.))

- M  
8-03162
- Sorokin, Iu. I.** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (4) : 914-7  
 Produktsiia fotosinteza fitoplanktona v Chernom more (Photosynthesis produce of phytoplankton in the Black Sea)

- M  
8-03163
- Brodskii, K. A.** (1962)  
*Dokl. Akad. Nauk SSSR*, 142 (6) : 1416-9  
 Opyt biometricheskogo analiza morfologicheskoi izmenchevosti *Calanus pacificus* Brodsky (Kopepoda) (An attempt at a biometric analysis of morphological variation in *Calanus pacificus* Brodsky)

- M  
8-03164
- Sorokin, Iu. I.** (1962)  
*Dokl. Akad. Nauk SSSR*, 145 (1) : 192-4  
 Vertikal'noe raspredelenie saprofitnykh bakterii v vodnoi tolshehe tsentral'noi chasti Tikhogo okeana (Vertical distribution of saprophytic bacteria within the water layers of the central part of the Pacific Ocean)

- Broetskii, K. A. (1962)** M  
8-03165  
*Dokl. Akad. Nauk SSSR*, 143 (3) : 709-12

Areally massovykh vidov roda *Calanus* Iuzhnogo polushariia (Distribution of mass species of the *Calanus* genus over the south hemisphere)

- Korotkevich, V. S. (1962)** M  
8-03166  
*Dokl. Akad. Nauk SSSR*, 144 (3) : 669-71

Novye dannye k voprosu o proiskhozhdenii pelagicheskikh nemertin (Recent data on the origin of pelagic Nemertini)

- Grainger, E. H. (1962)** M  
8-03167  
*J. Fish. Res. Bd Can.*, 19 (3) : 377-400  
Zooplankton of Foxe Basin in the Canadian Arctic

Collections from 100 stations in basin and adjacent waters of eastern Arctic, made in 1955, 1956 and 1957, are considered. Available information on physical oceanography of region is discussed, especially factors with apparent direct relationship to plankton distribution. Zooplankton standing crop on two sides of Foxe Basin is estimated, and related to water movement, depth, ice cover and turbidity. Forty-eight species of zooplankton are recorded. It is concluded that basin is region of opposed arctic and subarctic elements. Differences in zooplankton development in different years are related in part to variations in duration of ice cover.

- Caldwell, D. K. & C. R. Carlin (1962)** MG  
8-03168  
*Copeia*, (2) : 445-6

A photomicrographic adapter for stereomicroscopes useful in photographing fish larvae

During biological inventory of waters off the southeastern United States, conducted by the US Bureau of Commercial Fisheries, became necessary to make photographs of larval fishes collected in plankton tows. Stereomicroscope was most suitable instrument, modified device suggested by Mr. H. R. Bullis, Jr., of the US Bureau of Commercial Fisheries, which provides a simple adapter for mounting a single-lens reflex camera directly to one eyepiece barrel.

- Wood, E. J. F. (1962)** MG  
8-03169  
*Limnol. & Oceanogr.*, 7 (1) : 32-5  
A method for phytoplankton study

Method for quantitative and qualitative investigations of phytoplankton which can be employed at sea on fresh material is described. Samples are collected in van Dorn type samplers, centrifuged and examined under fluorescence microscope. Phytoplankton is counted by taking advantage of red autofluorescence of chlorophyll and total organisms by the Strügger technique using the induced fluorescence of acridine orange. Total particles—leptopel—can be counted by ordinary light using same equipment. A Petroff Hausser bacterial counter is used. Qualitative examinations are made on same material after sedimentation, using a special cell to minimize effect of ship's motion.

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**Steele, J. H. & I. E. Baird** (1962)

MG  
8-03170

*Limnol. & Oceanogr.*, 7 (1) : 42-7

Further relations between primary production, chlorophyll, and particulate carbon

Productivity of a sea loch, Loch Nevis, on west of Scotland, is estimated from nitrate and phosphate data. Chlorophyll *a* and particulate organic carbon data are used to study possible carbon : chlorophyll ratios in plants. For northern North Sea, carbon and chlorophyll samples during the spring flowering provide an estimated value of 23 : 1 for the carbon : chlorophyll ratio under very favourable conditions for growth. Possible causes of differences between the carbon : chlorophyll ratios for Loch Nevis and North Sea are discussed.

**Patten, B. C.** (1962)

MF  
8-03171

*J. Mar. Res.*, 20 (1) : 57-75

Species diversity in net phytoplankton of Raritan Bay

Annual diversity cycle is described, using entropy-related diversity indices. Theory of diversity change during succession is developed. Diversity levels in estuary increased downbay in association with diminishing pollution, and spatial pattern was strikingly related to general patterns of water mass circulation.

**Hood, D. W. & K. Park** (1962)

MF  
8-03172

*Physiol. Plant.*, 15 (2) : 273-82

Bicarbonate utilization by marine phytoplankton in photosynthesis

Pure cultures of *Nitzschia closterium*, *Platymonas* sp., fresh water and marine *Chlorella* sp. grown in laboratory were used for investigation.

**Griffith, R. E.** (1961)

MF  
8-03173

*Contr. Chesapeake biol. Lab.*, (172) : 79 p.

Phytoplankton of Chesapeake Bay—An illustrated guide to the genera

Key to genera; ill. description of spp. in each family; glossary and annotated bibliography; index.

**Lindquist, A.** (1961)

MF  
8-03174

*Rep. Inst. mar. Res. Lysekil*, (13) : 124 p.

Untersuchungen an *Limnocalanus* (Copepoda, Calanoida) (Investigations on *Limnocalanus* (Copepoda, Calanoida))

Review of biology, ecology of *L. macrurus* and *L. grimaldii* with special reference to Baltic estuaries.



**Sanders, H. L. et al.** (1962)

MF  
8-03175

*Limnol. & Oceanogr.*, 7 (1) : 63-79

A study of the intertidal fauna of Barnstable Harbor, Massachusetts

Intensive investigation of six localities on intertidal flats during summer of 1959. Less detailed study on same stations during summer 1960. 82 spp. were collected during two-years period. Stomach contents of 234 individuals representing 36 spp. Observations were made on the natural history of three dominant spp., *Gemma gemma*, *Clymenella torquata* and *Glycera dibranchiata*.

**Steele, J. H. & I. E. Baird** (1962)

MF  
8-03176

*Limnol. & Oceanogr.*, 7 (1) : 101-2

Notes and comments—Carbon-chlorophyll relations in cultures

Ci 61-11653. Previous paper described possible variations in the chlorophyll:carbon ratio of phytoplankton in the sea. Suggested that low ratios might correspond to slow growth rates imposed by nutrient limitation. To observe effect in more detail, and comparison with ecological results, experiments were carried out using same analytical techniques as were employed in the sea sampling.

**Frolander, H. F. & J. Pratt** (1962)

MF  
8-03177

*Limnol. & Oceanogr.*, 7 (1) : 104-6

Notes and comment—A bottom skimmer

Attempts to tow sampling nets very close to ocean or lake bottoms usually result in hauls of too short duration to obtain enough specimens, because of danger of lost or damaged equipment, or accidental sampling of quantities of bottom sediment through improper combinations of cable length, wire angle, and uneven bathymetry. Dredging attempts to secure these organisms usually yield relatively few of the desired specimens mixed with large quantities of bottom sediments. In recent attempts to secure quantities of newly settled meroplanktonic forms, as well as spp. that normally live on the bottom, use has been made of a towed, bottom-skimming sled equipped with a suitable collecting net.

**Smirnov, A. N.** (1962)

MF  
8-03178

*Dokl. Akad. Nauk SSSR*, 144 (3) : 656-8

O vliianii biogennogo stoka Dona i solenosti na razvitie zooplanktona v Taganrogskom zalive Azovskogo moria (The effect of biogenic run-off of the Don River and of salinity on the development of zooplankton in the Taganrog Bay of the Azov Sea)

**Beyers, R. J. (1962)**F  
8-03179

Thesis, Univ. of Texas, 190 p.

The metabolism of twelve aquatic laboratory microecosystems

DA 23 (1) 359. Basic properties of metabolism of balanced ecosystems studied using microcosm method. For over two years 12 freshwater laboratory microecosystems were kept in a constant temperature room under uniform conditions. Approximately one month after seeding with materials from a constant temperature spring the microecosystem metabolism established a steady state. Diurnal curves of respiration and photosynthesis were measured under experimental conditions which concerned overgrazing, temperature and photoperiod. Principal primary producers present were *Vallisneria* and *Oedogonium*, while the main animal biomass was made up of *Physa* and a burrowing oligochaete worm (*Sutroa*?).

**Erman, L. A. (1962)**F  
8-03180*Dokl. Akad. Nauk SSSR*, 144 (4) : 926-9

Pitanie i razmnzhenie planktonnykh kolovratok *Brachionus calyciflorus* Pall. v massovykh kulturakh (Nutrition and reproduction of *Brachionus calyciflorus* Pall. plankton in mass cultures)

**Ivanova, M. B. (1962)**F  
8-03181*Dokl. Akad. Nauk SSSR*, 145 (2) : 432-5

K voprosu o vertikal'nykh sutochnykh migratsiiakh planktonnykh Copepoda v gumifitsirovanom ozere (Vertical 24-hour migrations of planktonic Copepoda in humified lakes)

**Lund, J. W. G. (1962)**F  
8-03182*J. Fish. Res. Bd Can.*, 19 (3) : 501-4The periodicity of *Melosira islandica* O. Müll. in Great Slave Lake

Before his death, Professor D. S. Rawson asked author to examine samples of net plankton from certain Canadian lakes and discussed their qualitative composition.

## BENTHOS

**Ahearn, D. G., F. J. Roth, Jr. & S. P. Meyers (1962)**M  
8-03183*Canad. J. Microbiol.*, 8 (1) : 121-32A comparative study of marine and terrestrial strains of *Rhodotorula*

Yeasts of the genus obtained from subtropical marine environments classified by comparing them critically with type and authentic cultures. No distinctive metabolic differences ascribable to environmental influence were observed in comparing marine and terrestrial isolates. Identifications of spp. based on requirements for vitamins, ability to assimilate selected carbohydrates, and capacity to utilize nitrate nitrogen.

- M  
8-03184
- Southward, E. C.** (1962)  
*Canad. J. Zool.*, 40 (3) : 385-9  
 A new species of *Galathealinum* (Pogonophora) from the Canadian Arctic  
 Description of *G. arcticum* sp. nov.

- M  
8-03185
- Hwang, J. C.-C.** (1962)  
 Thesis, Univ. of Oregon, 83 p.  
 The functions of some sensory neurons in the pereopods of the crab *Cancer magister*  
 DA 23 (1) : 281-2.

- M  
8-03186
- Simpson, M.** (1961)  
 Thesis, The Catholic Univ. of America, 55 p.  
 Reproduction of the polychaete *Glycera dibranchiata* at Solomons, Maryland  
 DA 23 (1) : 367.

- M  
8-03187
- Dawes, C. J., F. M. Scott & E. Bowler** (1961)  
*Amer. J. Bot.*, 48 (10) : 925-34  
 A light- and electron-microscopic survey of algal cell walls—1. Phaeophyta and Rhodophyta

The structure of the thalli of the Phaeophyta and Rhodophyta is compared, and the occurrence of intercellular spaces, pitting, and microfibrillar patterns is discussed. A detailed comparison of the cell-wall structure and growth of a brown alga, *Dictyota flabellata*, and of a red alga, *Helminthocladia californica*, is also presented.

- M  
8-03188
- Anon.** (1962)  
*New Scient.*, 15 (305) : 628  
 Trends and discoveries—Missing algae found

Botanists in Swedish 'Sunbeam' returned from Sardinia with samples of *Bertholdia neopolitana*, algae discovered in the 1880s but since looked for in vain.

- M  
8-03189
- Shewan, J. M.** (1962)  
*Nature, Lond.*, 195 (4843) : 743  
 Deep-sea microbiology

Re 62-05175.

- Coughlan, J.** (1962) M  
8-03190  
*Nature, Lond.*, 195 (4843) : 831-2  
 Chain formation by *Phaeodactylum*

*P. tricornutum* (Bohlin) is a small marine diatom, with unexacting growth requirements. Rate of growth in relation to nutrition and environmental conditions has been widely studied in unialgal and bacteria-free culture, as well as in mass culture. Spp. also extensively cultured as food for rearing marine larval forms and filter-feeding invertebrates. Speculation has centred on its taxonomic position. During routine examination of cultures, it was found that *Phaeodactylum* had successfully invaded a declining culture of *Isochrysis galbana* (Parke) and was present as curved chains as well as single cells.

- Cohen, D. M.** (1962) M  
8-03191  
*Copeia*, (1) : 239  
 Reviews and comments  
 Re 61-03632.

- Eppley, R. W.** (1962) M  
8-03192  
*Physiol. Plant.*, 15 (2) : 246-51  
 Hydrolysis of polyphosphates by *Porphyra* and other seaweeds

*P. perforata* J. G. Agardh and other intertidal seaweeds were collected locally, California.

- Boilly, B.** (1962) M  
8-03193  
*C.R. Acad. Sci., Paris*, 255 (11) : 1414-6  
 Inhibition de la régénération caudale par irradiation X chez *Syllis amica* Quatrefages (annélide polychète) (Inhibition of caudal regeneration in *Syllis amica* Quatrefages (annelid polychaete) by X radiation)

- Domantay, J. S.** (1961) M  
8-03194  
*Philipp. J. Sci.*, 90 (2) : 271-95  
 An ecological survey of the marine vegetation of the Hundred Islands and vicinity

Noted different types of habitats with different forms of vegetation. Muddy bottoms found to be almost exclusively of phanerogamic spp. of genera *Posidonia*, *Thalassia*, *Diplanthera*, *Enhalus*, *Cymodocea* and *Halophila*. A few cryptogamic forms like *Halicoryne wrightii*, *Neomeris vanbossae*, *Bornetella oligospora* and *B. sphaerica* were also noted in the same habitat attached to coral and other hard substrata. In partly sandy-muddy bottoms, dominant forms were *Halimeda opuntia*, *Posidonia* and a few others. Brown and red algae with some green forms of genera *Caulerpa*, *Valonia*, *Halimeda*, inhabited sandy-rocky and coral reefs.



- M  
8-03195
- Barnes, H. & D. M. Finlayson** (1962)  
*Limnol. & Oceanogr.*, 7 (1) : 98  
Notes and comment—Presence of ascorbic acid in cirripede semen
- Presence in seminal plasma and centrifuged spermatozoa of *Balanus balanus*.
- M  
8-03196
- Roginskaia, I. S.** (1962)  
*Dokl. Akad. Nauk SSSR*, 146 (2) : 488–91  
Biologiya razmnozheniia i razvitiia *Cuthona pustulata* (G., N.) (The biology of propagation and development of *Cuthona pustulata* (Gastropoda, Nudi-branchia) )
- M  
8-03197
- Buznikov, G. A. & B. N. Manukhin** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (6) : 1414–7  
Tormoziashee veshchestvo embrionov molliuskov i ego rol' v reguliatsii embrional'noi motoriki (An "inhibitory substance" in mollusk embryos, and its role in the control of embryonic motoricity)
- M  
8-03198
- Pakhomova, M. V. & G. P. Serenkov** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (6) : 1390–3  
Izuchenie nukleotidnogo sostava RNK zelenoi vodoroslei *Dunaliella salina* (A study of the nucleotid composition of RNA in the green alga *Dunaliella salina*)
- M  
8-03199
- Ivanov, A. I.** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (4) : 911–3  
Kolichestvennoe raspredelenie molliuskov roda *Modiolus* (*M. phaseolina* Phil. i *M. adriatica* Lam.) u kavkazskikh beregov Chernogo moria (The quantitative distribution of Mollusca of the genus *Modiolus* (*M. phaseolina* Phil. and *M. adriatica* Lam.) near the Caucasian coast of the Black Sea)
- M  
8-03200
- Sokolova, M. N. & F. A. Pasternak** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (3) : 645–8  
Kolichestvennoe raspredelenie donnoi fauny v severnoi chasti Araviiskogo moria i v Bengalskom zalive (Quantitative distribution of bottom fauna in the northern part of the Arabian Sea and in the Bengal Bay)
- M  
8-03201
- Dzhamusova, T. A.** (1962)  
*Dokl. Akad. Nauk SSSR*, 145 (1) : 189–91  
Issledovanie funktsional'nykh izmenenii myshechnoi tkani *Neptunea eulimata* Dall (M.) pri dlitel'nom temperaturnom vozdeistvii (A study of functional variations of muscular tissue in the mollusk *Neptunea eulimata* Dall exposed to prolonged thermal treatment)

**McCrimmon, H. & J. Bray** (1962)

M  
8-03202

*J. Fish. Res. Bd Can.*, 19 (3) : 489-96

Observations on the isopod *Mesidotea entomon* in the western Canadian Arctic Ocean

Collection during 1960 cruise of 'Salvelinus' has expanded recorded distribution of spp. Population densities were highest in mud-bottomed areas. No specimens collected at depths greater than 24 fathoms. Sexual dimorphism.

**Silva, E. de Sousa** (1959)

MF  
8-03203

*Notas Estud. Inst. Bio. marit.*, (21) : 15 p.

Some observations on marine dinoflagellate cultures—1. *Prorocentrum micans* Ehr. and *Gyrodinium* sp.

Study of toxicity of the spp. in pure culture.

**Hill, E. P.** (1962)

MF  
8-03204

Thesis, Univ. of Nebraska, 56 p.

Some effects of hydrostatic pressure on growth and mitochondria of *Allomyces macrogynus*

DA 23 (1) : 40. Action of pressure, subjected at increments of 1, 200, 400, 600 and 1,000 atmospheres on sporophyte of aquatic phycomycete.

**Klekowski, R. Z.** (1961)

MF  
8-03205

*Polsk. Arch. Hydrobiol.*, 9 (22) : 383-406

Survival of *Planorbis planorbis* (L.) and other snails in diluted sea-water and during the following desiccation

**Parke, M. & G. T. Boalch** (1962)

MF  
8-03206

*Nature, Lond.*, 195 (4838) : 212

The algae

Re 62-02529.

**Fretter, V. & A. Graham** (1962)

MF  
8-03207

London, Ray Soc., 755 p.

British prosobranch molluscs—Their functional anatomy and ecology

Introductory account of Mollusca followed by a general description of *Littorina littorea* as a typical prosobranch. Chapters dealing with functional morphology, from shell and mantle cavity to reproductive system and the formation of spawn. Description of development and of larval forms. 3rd section deals with ecology and is concerned with the limpets, whelks and tingle and other prosobranchs of rocky shores, with those of other marine habitats, with prosobranch inhabitants of brackish and fresh-waters and of the land, and finally with parasites of these animals.

**Yonge, C. M.** (1962)  
*Nature, Lond.*, 195 (4843) : 740-1  
 British prosobranchs

MF  
 8-03208

Re 8-03207.

**Gould, S. W.** (1962)  
 New Haven, 111 p  
 Family names of the plant kingdom—Vol. 1

MF  
 8-03209

1st volume of I.P.Ix, giving account of project—with details of card design—involving assignment of code numbers to all plant taxa and synonyms. Later volumes will give codes to genera, and spp. and varieties. Present volume gives lists in systematic and alphabetic order, of orders and Rigler taxa, operative families, synonyms, bibliography, authors; with specimen sheets for future bibliography of genera, and authors arranged by publications. [The codes here given will eventually be adopted instead of the present codes for plant groups for indexing the *Curr. Bibliogr. aquat. Sci. Fish.*]

**Anon.** (1962)  
*New Scient.*, 16 (307) : 29  
 Science in British industry—Fighting *Spartina*

MF  
 8-03210

*S. townsendii* sown to stabilize tidal flats is spreading in England and choking waterways. Note on herbicide tests.

**Greenberg, M. J. & D. A. Windsor** (1962)  
*Science*, 137 (3529) : 534-5  
 Action of acetylcholine on bivalve hearts

MF  
 8-03211

Isolated hearts of comprehensive selection of bivalves tested to determine distribution of excitator and depressor effects of acetylcholine. Some intra-family uniformity of response exists. Genera studied incl. *Mytilus*, *Pecten*, *Crassostrea*, *Mercenaria*, *Tapes*, *Clinocardium*, *Solen*, *Anodonta*, *Mya*.

**Kindel, P. K.** (1962)  
 Thesis, Cornell Univ., USA, 134 p.

F  
 8-03212

Incorporation of C<sup>14</sup> labeled compounds into the polysaccharides of *Chlorella pyrenoidosa* and *Anacystis nidulans* in dark and in light

DA 23 (1) : 56.

**Bushnell, J. H., Jr.** (1961)  
 Thesis, Michigan State Univ., 323 p.

F  
 8-03213

The Bryozoa of Michigan: taxonomy, ecology and distribution (Part 1). Growth, mortality, and longevity of *Plumatella repens* (Part 2)

DA 23 (1) : 360.

- Shafer, J., Jr., J. E. Baker & J. F. Thompson** (1961) F  
8-03214  
*Amer. J. Bot.*, 48 (10) : 896-9  
 A *Chlorella* mutant lacking nitrate reductase
- Following ultraviolet irradiation of *C. pyrenoidosa*, a mutant was isolated which could not utilize nitrate nitrogen but which could use nitrite, ammonia and some organic nitrogen compounds.
- Klimowicz, H.** (1961) F  
8-03215  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 203-21  
 Rotifers of the Nile canals in the Cairo environs
- Klimowicz, H.** (1961) F  
8-03216  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 223-42  
 Differentiation of rotifers in various zones of Nile near Cairo
- Madaliński, K.** (1961) F  
8-03217  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 243-63  
 Moss dwelling rotifers of Tatra streams
- Chodorowska, W.** (1961) F  
8-03218  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 265-85  
 Free-living Nematoda fauna in small pools of the Kampinos forest
- Moraczewski, J.** (1961) F  
8-03219  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 175-94  
*Testacea* du littoral peu profond du lac Kisajno (région des lacs de Mazurie)  
 (*Testacea* of the shallow littoral of Kisajno Lake—Masurian lakes)
- Fischer, E.** (1961) F  
8-03220  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 319-47  
 Próba charakterystyki mikrobiologicznej jednego z drobnychz biorniókw okolic Warszawy w okresie zimowym (Attempt of the microbiological characteristic of a small pond in Warsaw environs in winter season).  
 En Ru
- Czeczuga, B.** (1961) F  
8-03221  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 349-60  
 Intensywność rozmnażania się i produkcja bakterii jezior Rajgrodzkich w okresie letnim (Intensity of multiplication and production of bacteria in Rajgrodzkie lakes in summer). *Pl* En Ru
- Klekowski, R. Z.** (1961) F  
8-03222  
*Polsk. Arch. Hydrobiol.*, 9 (22) : 361-81  
 Gas compression in the lungs of desiccating snails *Coretus corneus* L. and *Limnaea stagnalis* (L.)



- F  
8-03223
- Gilchrist, B. M. & J. Green** (1962)  
*Nature, Lond.*, 195 (4844) : 905-7  
 Carotenoid pigments in Rotifera

Dense population of *Philodina roseola* Ehrb. was found in a dish in which *Chirocephalus diaphanus* was being cultured. The rotifers formed dense pink patches on the sides of the dish, and when these patches were scraped off with a clean scalpel they were found to consist of thousands of individuals, with even greater numbers of pink eggs. Carotenoid pigments were extracted.

- F  
8-03224
- Treharne, R. W. & H. C. Eyster** (1962)  
*Biochem. biophys. Res. Commun.*, 8 (6) : 477-80

Electron spin resonance study of manganese and iron in *Chlorella pyrenoidosa*

- F  
8-03225
- Treharne, R. W. & L. P. Vernon** (1962)  
*Biochem. biophys. Res. Commun.*, 8 (6) : 481-5

Light saturation studies on the electron spin resonance signals observed with *Chlorella pyrenoidosa*

- F  
8-03226
- Anon.** (1962)  
*Limnol. & Oceanogr.*, 7 (1) : 109

Notes and comments—Glaciers and winter stoneflies

Note on project of Dr. H. H. Ross and Dr. W. E. Ricker on relationships and distribution of adult winter stoneflies in an effort to deduce the living conditions south of the advancing and retreating glaciers in eastern North America. Data required are name of stream, locality, date and collector.

- F  
8-03227
- Fedorov, V. D.** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (6) : 1380-3

O zakonomernosti otmiraniia kletok v razmnozhaiushchikhsia kul'turakh sinezelenykh vodoroslei *Anabaena variabilis* i *Amorphonostoc punctiforme* (On the regularity underlying the dying-off of cells in multiplying cultures of blue-green algae *Anabaena variabilis* and *Amorphonostoc punctiforme*)

- FG  
8-03228
- Clatworthy, J. N. & J. L. Harper** (1962)  
*J. exp. Bot.*, 13 (38) : 307-24

The comparative biology of closely related species living in the same area—  
 5. Inter- and intraspecific interference within cultures of *Lemna* spp. and *Salvinia natans*

Studies of growth of populations of *L. minor*, *L. polyrrhiza*, *L. gibba* and *Salvinia natans* under controlled laboratory conditions. Intrinsic exponential growth-rates of clones were determined in incrowded cultures, and the changes in growth-rate of self-crowding cultures were measured and interpreted in terms of an initial exponential growth-rate followed by a phase of arithmetic increase in weight and followed in turn by a phase in which the death of submerged and shaded fronds caused a decline from the arithmetic rate of growth.

## FISHING

**Carranza, J. (1962)**M  
8-03229

Thesis, Univ. of Michigan, 193 p.

Survey of the marine fisheries and fishery resources of the Yucatan Peninsula, Mexico

DA 23 (1) : 8-9. Report is part of broad investigation of natural resources of the Yucatan Peninsula carried on by seventeen scientists under the patronage and coordination of the Mexican Institute of Natural Renewable Resources. Marine environment of peninsula is described. Shrimp fisheries, red grouper, fishing equipment, possible development is discussed. Seaweeds, sponge fisheries, spiny lobsters, octopus, oyster, squid and green conch, large sharks, green turtle.

**Anon. (1962)**M  
8-03230*Econ. Rev. Holl. Bank-Unie N.V., Brazil, 289 : 3*

Fishing

TA 17 (9). Brief note: recently published figures concerning Brazil's fishing industry.

**Film (1960?)**M  
8-03231

Ghana Film Production Corporation, Ghana

Ahead to prosperity

16 mm, b and w, sound, 20 min. Shows the efforts being made in Ghana to mechanize the fishing canoes.

**FAO/UN (1962)**M  
8-03232*Rep. FAO/EPTA, (1548) : 6 p.*

Informe al gobierno de Chile sobre la reconstrucción de la flota pesquera después del terremoto de 1960 (Report to the Government of Chile on the reconstruction of the fishing fleet after 1960 earthquake)

**Anon. (1962)**M  
8-03233*Instrum. Contr. Syst., 35 (8) : 133*

Depth transducer

Note on new instrument model for sea-water pressure to 1000 psia.

**California. Department of Fish & Game. Biostatistical Section,**M  
8-03234**Marine Resources Operations (1961)***Fish. Bull., Sacramento, (117) : 45 p.*

Annual and monthly landings and shipments, licensed commercial fishermen, number of fishing boats by length, origin of landings and shipments, value of landings, sport and live bait catches.

# FISHING

- Anon.** (1962) M  
8-03235  
*Norsk Hvalfangsttid.*, 51 (8) : 305-12  
 Gunner results 1961-62. *En No*

Results for Norwegian, British and Japanese whaling expeditions in Antarctic season.

- Anon.** (1962) M  
8-03236  
*Norsk Hvalfangsttid.*, 51 (8) : 312-28  
 The world catch 1961. *En No*

Comment on provisional issue of International Whaling Statistics No. 49.

- Taylor, G. T.** (1961) M  
8-03237  
*W. Ind. Fish. Bull.*, (6) : 1-9  
 An experiment in fisheries cooperatives

Co-operative fishing operation, fishing grounds and methods, marketing in St. Lucia.

- FAO/UN** (1962) M  
8-03238  
*Rep. FAO/EPTA*, (1494) : 19 p.

Rapport au Gouvernement de la République du Viet-Nam sur l'organisation et le fonctionnement d'un centre de perfectionnement pour les pêches (Report to the Government of Viet-Nam on the organization and operation of fishermen's training centre), based on the work of P. A. Lusyne and J. Gilles

Report on FAO project carried out under UN Expanded Program of Technical Assistance for a national training centre.

- Krasiuk, V. S.** (1961)\* M  
8-03239  
*Sudostroenie*, 27 (7) : 55  
 (The choice of principal dimensions of fishery base vessels). *Ru*

- Krasyuk, V. S.** (1962)\* M  
8-03240  
 M. 3881  
 The choice of principal dimensions of fishery base vessels

*En* 8-03239. Available from the National Lending Library for Science and Technology, Boston Spa, Yorkshire.

- Brown, W. D. et al.** (1962) M  
8-03241  
*J. biol. Chem.*, 237 : 81-4  
 Comparative biochemistry of myoglobins

WFA 13 (4) : 1. Chemistry, organic—proteins.

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- M  
8-03242
- Ianovskii, V. Ia. & V. A. Zavarin** (1961)  
*Sudostroenie*, 27 (9) : 1-9  
 Fish-factory depot ship 'Andrei Zakharov'  
 WFA 13 (4) : 7. Factory ship—mothership.
- M  
8-03243
- De Wit, J. G.** (1961)  
*Holland Shipbuild.*, 10 (5) : 36-8  
 Aspects of the combination fishing vessels  
 WFA 13 (4) : 9. Fishing boats—multipurpose boats—design considerations.
- M  
8-03244
- Anon.** (1961)  
*Fish Boat*, 6 (8) : 22-3, 40-1  
 Combination trawler-seiner longliner proves merit of building method  
 WFA 13 (4) : 9. Fishing boats—multipurpose boats—'Northern Light II', U.S.A.
- M  
8-03245
- Anon.** (1961)  
*World Fish.*, 10 (5) : 36  
 A multi-purpose sixty-footer  
 WFA 13 (4) : 9. Fishing boats—multipurpose boats.
- M  
8-03246
- Anon.** (1961)  
*Fish Boat*, 6 (12) : 24-7, 52-3  
 Unique multi-purpose boat designed for quick-switch fishing  
 WFA 13 (4) : 9. Fishing boats—multipurpose boats.
- M  
8-03247
- Anon.** (1961)  
*Pacif. Fisherm.*, 59 (11) : 13, 15, 17-9  
 'Royal Pacific', first of the new fleet  
 WFA 13 (4) : 9. Fishing boats—purse seiners—tuna.
- M  
8-03248
- Anon.** (1961)  
*Hansa*, 98 : 2488 95  
 Bau und Betrieb von Heckfängern (The design and operation of stern trawlers)  
 WFA 13 (4) : 9. Fishing boats—stern trawlers—design considerations.
- M  
8-03249
- Anon.** (1961)  
*World Fish.*, 10 (12) : 60  
 German designers discuss stern trawlers  
 WFA 13 (4) : 9. Fishing boats—stern trawlers—design considerations.



# FISHING

**Anon.** (1961) M  
8-03250  
*Mot. Ship*, 42 : 414-5  
 A fish factory ship for German owners

WFA 13 (4) : 11. Fishing boats, stern trawlers—factory ships—fishing—freezing—'Burgermeister Smidt', Germany.

**Anon.** (1961) M  
8-03251  
*Schiff u. Hafen*, 13 : 820-2  
 Hecktrawler 'Sirius' (The stern trawler 'Sirius')

WFA 13 (4) : 11. Fishing boats, stern trawlers—'Sirius'—Germany.

**Anon.** (1961) M  
8-03252  
*World Fish.*, 10 (5) : 36-7  
 A diesel outboard for fishing

WFA 13 (4) : 13. Marine engines—outboard—diesel.

**Michel, W. H.** (1961) M  
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*Shipbuild. Progr.*, 8 : 390-401  
 The sea-going catamaran ship, its features and feasibility

WFA 13 (4) : 13. Naval architecture—catamaran ship.

**Squire, J. L., Jr.** (1961) M  
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*Comm. Fish. Rev.*, 23 (12) : 1-7  
 Aerial fish spotting in the United States of America

WFA 13 (4) : 15. Detection of fish—aerial spotting.

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8-03255  
*Comm. Fish. Rev.*, 23 (11) : 1-7

Investigation of the potential albacore resources of the central North Pacific

WFA 13 (4) : 15. Fishing, experimental—tuna—albacore—Pacific, U.S.A.

**Gordon, W. G.** (1962) M  
8-03256  
*Comm. Fish. Rev.*, 24 (4) : 33-6  
 Fishing vessel and gear developments. Equipment note No. 11. A Great Lakes stern-ramp trawler

WFA 13 (4) : 19. Fishing boats—gillnetters—conversion to trawlers—fish—fishing methods and gear—dragnets—otter trawls.

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*Ryb. Khoz.*, 37 (7) : 43-9

Ob optimal'nykh skorostiakh traleniia (On optimum trawling speeds)

WFA 13 (4) : 21. Fishing methods and gear—dragnets—otter trawls.

**Matrosov, I. R.** (1961)

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*Ryb. Khoz.*, 37 (6) : 41-53

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(Theoretical basis for calculation of the motion of a vessel towing a trawl)

WFA 13 (4) : 21. Fishing methods and gear—dragnets—otter trawls—  
fishing boats—trawlers.

**Tomlinson, N. & V. M. Creelman** (1960)

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*J. Fish. Res. Bd Can.*, 17 : 603-6

On the source of free ribose formed *post-mortem* in the muscle of ling cod  
(*Ophiodon elongatus*)

WFA 13 (3) : 3. Biochemistry—muscle metabolism—fish.

**Film** (1961)

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Moody Institute of Science, Los Angeles

Fish out of water

16 mm, colour, b and w, sound, 11 min.

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WFA 13 (3) : 5. Tuna, mackerels, etc.—exploration—eastern Pacific,  
Australia.

**Ranken, M. B. F.** (1961)

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*Fish. News int.*, 1 (1) : 53-6

Fish factories and freezing vessels for tropical waters

WFA 13 (3) : 5. Factory ships—for tropics.

**Anon.** (1961)

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*World Fish.*, 10 (5) : 65-6

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Rome, 37 p. 8-03264  
Statistics of hunger

Booklet containing set of food production and nutrition charts for promotion of FFHC. Contains section "More food from the sea" summarizing fish production statistics, examples of rapid national increases and of effect of boat mechanization in Ceylon.

**Anon. (1962)** MF  
Notes Banque centr. Ét. Afr. Ouest, 82 : 1-20 8-03265  
Les produits de l'élevage et de la pêche au Niger (Livestock and fisheries produce in Niger)

TA 17 (9) jj822. Brief information on fish production, export and consumption.

**Kirton, A. G. (1961)** MF  
W. Ind. Fish. Bull., (6) : 10-7 8-03266  
Fisheries development in Jamaica

Recent developments in marine and freshwater fisheries.

**U.K. Department of Agriculture & Fisheries for Scotland (1961)** MF  
Scot. Sea Fish. statist. Tab., 1960 : 47 p. 8-03267

Co 61-11504. Tables of fish landed in UK and in Scotland, 1938, 1946, 1956-60 and some other years; by various types of British and foreign vessels, by gears, ground, ports, spp. ; fishing efforts and landed quantities and values. Special tables for herring fisheries, by season and for *Nephrops*; quantities and values of whitefish and herring cured, by method of cure; numbers of vessels and fishermen, by districts.

**Japan. Ajia Kenkyu & Ajia Keizei Junpo (1961?)** MF  
JPRS, 9817 : 49 p. 8-03268  
Development in the fishing industry in communist China

En 8-03269. Available from Photoduplication service, Library of Congress, Washington.

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WFA 13 (4) : 5. Fisheries industries—China, Mainland.

**Tomlinson, N. et al. (1961)**

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*J. Fish. Res. Bd Can.*, 18 : 321-36

Observations on the *post-mortem* biochemical changes in fish muscle in relation to *rigor mortis*

WFA 13 (3) : 3. Biochemistry—muscle metabolism—fish.

**Grosslein, M. D. (1962)**

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Thesis, Cornell Univ., USA, 311 p.

Estimation of angler harvest on Oneida Lake, New York

DA 23 (1) : 11-2. Sample creel survey conducted during summer and winter 1957, 1958 and 1959. Estimating total angler catch of walleyes and determining the accuracy of these estimates comprised major phases of the survey. Common methods of estimating fishing effort, catch rate, and total catch were evaluated, and the characteristics of the sport fishery described.

**Lapinskaya, E. M., A. N. Mironova & M. A. Khenokh**

G  
8-03273

(Israel Program for Scientific Translations, Transl.) (1961?)

PST Cat. No. 59

Effect of ultrasonic waves upon albumin and amino acids

*En* 1954, Lapinskaya, E. M., A. N. Mironova & M. A. Khenokh. WFA 13 (4) : 1. Chemistry, organic—proteins. Available from Office of Technical Services, Washington, D.C.

**Tench, C. V. (1961)**

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*Food Manuf.*, 36 (12) : 517-9

Freezing crabs afloat

WFA 13 (4) : 7. Crustaceans—crabs—fishing—freezing—aboard—Bering Sea factory ships.

**Young, O. C. (1961)**

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*Canad. Fisherm.*, 48 (12) : 29-30

Freezing fish at sea aboard Canadian fishing boats

WFA 13 (4) : 13. Factory ship—freezing—freezing methods and equipment—aboard, fish.



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8-03276  
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WFA 13 (4) : 13. Factory ship—freezing—freezing methods and equipment—aboard, fish.

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WFA 13 (4) : 23. Air freight of fishery products.

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8-03278  
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*Res. Ser. S.C. agric. Exp. Sta.*, 23 : 45 p.

The effect of Norwegian seaweed (*Ascophyllum nodosum*) on the development of certain horticultural and special crops

WFA 13 (4) : 43. Seaweeds—direct use—as fertilizer.

X  
8-03320

**Aitken, J. B., T. L. Senn & J. A. Martin** (1961)  
*Res. Ser. S.C. agric. Exp. Sta.*, 24 : 28 p.

The effect of varying concentrations of Norwegian seaweed (*Ascophyllum nodosum*) on Duncan grapefruit and pineapple orange seedlings under greenhouse conditions

WFA 13 (4) : 43. Seaweeds—direct use—as fertilizer.

X  
8-03321

**Mrochkov, K. A., A. I. Gusev & F. Kolotvin** (Styr, J. et al. Transl.) (1960)

PST Cat No. 109 : 217–33

Research on establishing optimum conditions for the processing of subcutaneous whale blubber in the vacuum apparatus chain of the 'Slava'

WFA 13 (4) : 45. Whale processing—blubber—vacuum processing.

X  
8-03322

**Savant, P. L.** (1961)  
*J. sci. Industr. Res. (C)*, 20D (8) : 313–6

Nutritive value of canned fish: effect of canning, storage and antioxidants

WFA 13 (4) : 45. Canned fish—chemical composition—miscellaneous species and products.

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8-03323

**Govindan, T. K.** (1962)  
*Sci. & Cult.*, 28 (1) : 36–7

Some new indices of quality for ice stored prawns

WFA 13 (4) : 47. Fresh shellfish—crustaceans—shrimps—grading—chemical.

X  
8-03324

**Velankar, N. K. et al.** (1961)  
*J. sci. Industr. Res. (C)*, 20D (5) : 189–91

Spoilage of un-iced prawns and its assessment by objective standards

WFA 13 (4) : 47. Fresh shellfish—crustaceans—shrimps—grading—chemical.

X  
8-03325

**Tarr, H. L. A. & M. Leroux** (1962)  
*J. Fish. Res. Bd Can.*, 19 (3) : 519–20

A note concerning the origin and quantitative distribution of acid-soluble phosphorus compounds and free sugars in fish muscle

X  
8-03326**Dussault, H. P.** (1962)*J. Fish. Res. Bd Can.*, 19 (3) : 437-44

Enumeration of coliform bacteria in light salted fish brines

## AQUATIC STOCKS

M  
8-03327**Dawson, C. E.** (1962)*Copeia*, (2) : 330-6A new gobioid fish, *Microdesmus lanceolatus*, from the Gulf of Mexico with notes on *M. longipinnis* (Weymouth)

New sp. of Microdesmidae described from off coast of Louisiana. Morphological variation in *M. longipinnis*, only known congener in Gulf, is ill. Key given to Atlantic spp. Evidence presented to establish family among the gobioid fishes rather than among the blennioids. Incl. of genus in Gunnelichthyidae is considered untenable.

M  
8-03328**Caldwell, D. K.** (1962)*Copeia*, (2) : 417-24

Western Atlantic fishes of the family Priacanthidae

Key based on meristics, presented for the 4 spp.: *Pseudopriacanthus altus* (Gill), *Priacanthus cruentatus* (Lacépède), *Priacanthus arenatus* Cuvier, and *Cookeolus boops* (Bloch & Schneider). Geographical ranges are noted and systematic and ecological comments incl.

M  
8-03329**Briggs, J. C.** (1962)*Copeia*, (2) : 424-5A new clingfish of the genus *Lepadichthys* from the New Hebrides

*L. bolini* is described. This makes 5 known spp. in genus, all confined to tropical waters of Indo-West Pacific. Artificial key to genus is presented.

M  
8-03330**Springer, V. G.** (1962)*Copeia*, (2) : 426-33A review of the blennioid fishes of the genus *Ophioblennius* Gill

Review indicates presence of 2 spp. each represented by 2 sub-spp. *O. s. steindachneri* is widespread in the eastern Pacific from California to Peru but absent from Clipperton Island where a new endemic sub-sp. *O. s. clippertonensis* is described. *O. a. atlanticus* is known from the west coast of Africa and adjacent islands to eastern coast of Brazil. *O. a. macclurei* is widespread in the Caribbean Atlantic.



# AQUATIC STOCKS

- Briggs, J. C. (1962)** M  
8-03331  
*Copeia*, (2) : 440  
 Restoration of the frogfish, *Antennatus reticularis* (Gilbert)

Ci 582770. In attempting to identify some eastern Pacific frogfishes in the Stanford Natural History Museum, two Gulf of California specimens of *Antennatus* found to differ from those of localities farther south.

- Ward, J. W. (1962)** M  
8-03332  
*Copeia*, (2) : 440-2  
 Description of the eyes of a blind specimen of the red drum, *Sciaenops ocellata*

Ci 29-2244BO. Fish taken in Alazan Bay, south Texas, by a commercial fisherman in June 1955. Undissected general features of the whole fish previously described and figured.

- Dawson, C. E. (1962)** M  
8-03333  
*Copeia*, (2) : 442-4  
 New records and notes on fishes from the north-central Gulf of Mexico

Notes on spp. of *Neoconger*, *Rypicus*, *Fistularia*, *Steindachneria*, *Abudefduf*, *Conodon*, *Pomacentrus*, *Canthidermis*, *Amanes*, *Xanthichthys*.

- Pounds, S. (1962)** M  
8-03334  
*Copeia*, (2) : 444-5  
 An unusually large lockdown, *Selene vomer*, from Texas

Specimen caught from jetty at Port Aransas by fisherman using a rod and reel, in August 1961. Measured total length 483 mm, weighed 3 pounds 4 ounces.

- Scattergood, L. W. (1962)** M  
8-03335  
*Copeia*, (2) : 446-7  
 White sharks, *Carcharodon carcharias*, in Maine, 1959-60

Sp. has reputation of being dangerous to man. Paper presents 12 records of white sharks caught along the Maine coast. Eight captures in 1960 represent the greatest number recorded for any one year along the US Atlantic coast. Number can be attributed in part to the publicity given to shark captures. Also reviews previous occurrences and discusses confusion by fishermen, with *Lamna nasus* and *Isurus oxyrinchus*.

- Hazlett, B. & H. E. Winn (1962)** M  
8-03336  
*Copeia*, (2) : 447-9  
 Sound producing mechanism of the Nassau grouper, *Epinephalus striatus*

Ci 583670. Effort was made at the Bermuda Biological Station during summer 1961 to clarify the origin of sound. Describes laboratory experiments indicating that single bilateral muscle and intact air bladder comprise the sound mechanism.

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*Copeia*, (2) : 453

M  
 8-03337

A new spawning area for *Istiophorus albicans* and the capture of two post-larval istiophorids from the Texas coast

Location of new spawning and subsequent capture of 2 postlarval specimens of family near breeding swarm has contributed additional data to life history and distribution of these fishes. Large number of adults taken during the annual fishing tournament at Port Aransas—12-13 Jul. 1961.

**Miller, D. & R. R. Marak** (1962)  
*Copeia*, (2) : 454-5

M  
 8-03338

Early larval stages of the fourspot flounder, *Paralichthys oblongus*

Eggs obtained by artificially spawning ripe male and female specimens taken off Point Judith, Rhode Island, on 9 Jul. 1958. After fertilization, were brought to Bureau of Commercial Fisheries' Biological Laboratory at Woods Hole, where they were allowed to develop.

**Vorenberg, M. M.** (1962)  
*Copeia*, (2) 455-6

M  
 8-03339

Cannibalistic tendencies of lemon and bull sharks

Lake Worth, a salt water estuary of the southeastern coast of Florida, frequented in its lower reaches by *Negaprion brevirostris* and *Carcharinus leucas*. Author notes observations of cannibalism when fishing for them with live-bait.

**Boschung, H. T., Jr. & J. Couch** (1962)  
*Copeia*, (2) : 456-7

M  
 8-03340

A record of the sand shark, *Carcharias taurus*, off Pensacola, Florida

Common in summer fauna of mid-Atlantic coast of the US and Canada, infrequently reported in Gulf of Mexico north and west of Clearwater, Florida. On 1 Apr. 1961 a male speared by J. Couch while scuba diving over a sunken freighter 8 miles off the west end of Santa Rosa Island, Florida.

**Essapian, F. S.** (1962)  
*Copeia*, (2) : 457-9

M  
 8-03341

Notes on the behavior of sharks in captivity

Observations recorded pertain to *Carcharias taurus*, *Ginglymostoma cirratum*, *Carcharhinus leucas*, *Eulamia milberti*, *Negaprion brevirostris* and *Galeocerdo cuvier*. Chiefly made at Miami's Seaquarium, but writer also observed the behavior of marine animals at Marine Studios, Marineland, Florida, from 1949 to 1955.

**Breder, C. M., Jr.** (1962)

*Copeia*, (2) : 459-62

Effects of a hurricane on the small fishes of a shallow bay

Ci 61-12254. Catches by traps of Breder at Lemon Bay, Florida, Gulf of Mexico, before, during and after hurricane "Donna", 10 Sep. 1960.

**Mees, G. F.** (1962)

*Copeia*, (2) : 462

Occurrence of internal nares in the genus *Ichthyoscopus* (Pisces, Uranoscopidae)

Checked Uranoscopidae in the collection of Western Australian Museum, and found that internal nares are present in *I. spinosus*, *I. barbatus* and *I. insperatus*. Position of nares as described by Atz for *Astroscopus guttatus*. 2 spp. of *Kathetostoma*, *K. laevis* and *K. nigrofasciatum*, also examined, but no internal nares were found.

**Scattergood, L. W.** (1962)

*Copeia*, (2) : 462

First record of mako, *Isurus oxyrinchus*, in Maine waters

Specimens with estimated weight of 400 to 450 pounds harpooned Jul. 1957 off Boon Island, York County, by commercial fishermen. With this identification, western Atlantic range of *I. oxyrinchus* is extended northwards to the southeastern coast of Maine.

**Boyar, H. C.** (1962)

*Copeia*, (2) : 463-5

Blood cell types and differential cell counts in Atlantic herring, *Clupea harengus harengus*

Gulf of Maine and Bay of Fundy herring are difficult to age with usual methods, and new approaches are being tried. One is to determine if qualitative and/or quantitative differences in blood cells are discernible in herring of different lengths. This note describes various cell types and their frequency of occurrence in three length groups.

**Caldwell, D. K.** (1962)

*Copeia*, (2) : 467-8

An announcement of specimens available as types for the istiophorid fishes *Istiompax marlina* and *Istiophorus greyi*

Note announces existence of one specimen available as a type for each of 2 apparently valid spp. described as new in Jordan & Evermann 1926. While mounted and subject to the whims of the taxidermist, the 2 specimens do serve as more positive criteria for future systematic comparisons than the photographs of the entire fishes used in that paper. Both now in collections of the Los Angeles County Museum.

- Talbot, F. H. & J. J. Penrith** (1962) M  
8-03347  
*Copeia*, (2) : 468  
 Spearing behavior in feeding in the black marlin, *Istiompax marlina*

CI 580921. On 27 Jan. 1961, *I. marlina* (Jordan & Hill), 580 pounds in weight, taken by Japanese long-line, west of the Cape Peninsula, S. Africa. Had swallowed whole a 75-pound *Thunnus albacores*.

- Deubler, E. E., Jr. & J. C. White, Jr.** (1962) M  
8-03348  
*Copeia*, (2) : 468-9  
 Influence of salinity on growth of postlarvae of the summer flounder, *Paralichthys dentatus*

CI 59-2077 and 583187. Presents results of a brief study under laboratory conditions. Postlarvae were collected from surface waters of Bogue Sound at Morehead City, North Carolina, in Feb. 1961, following method of 583187.

- Scheline, R. R.** (1962) M  
8-03349  
*Nature, Lond.*, 195 (4844) : 904-5  
 O-methylation in fish

During investigation of fate of some foreign organic compounds in fish, metabolism of 3,4-dihydroxyphenylacetic acid (homoprotocatechuic acid) was investigated with the purpose of obtaining some information on methylation reactions in *Gadus callarias*.

- Gulland, J. A. & G. R. Williamson** (1962) M  
8-03350  
*Nature, Lond.*, 195 (4844) : 921  
 Transatlantic journey of a tagged cod

Although *Gadus morhua* population in North Atlantic form more or less discrete stocks, many tagged cod have travelled long distances, for example, between Iceland and Greenland, from Iceland to the Faeroes, and the Faeroes to the North Sea, and from Bear Island to Iceland and Greenland. Tag, which had been attached to a cod caught in central North Sea on 9 Jun. 1957, was recovered on 7 Dec. 1961. Fish had grown from 57 cm total length when tagged to 75 cm when recaptured.

- Postel, E.** (1962) M  
8-03351  
*Sci. et Nat.*, (52) : 3-7  
 La transplantation des plies en Mer du Nord (The transplantation of plaice in the North Sea)

Popular article reviewing historically experiments on transplantation of *Pleuronectes platessa*.



# AQUATIC STOCKS

- Springer, V. G. & A. J. McErlean** (1962) M  
8-03352  
*Amer. Midl. Nat.*, 67 (2) : 386-97

A study of the behavior of some tagged South Florida coral reef fishes

Several of larger spp. found on unique patch reefs were trapped and tagged over one-year period. Many recaptured, some as many as 10 to 41 times, and almost invariably on their home reefs. Suspect trap conditioning. Transplants of small numbers of white grunts.

- Rass, T. S.** (d.u.)\* M  
8-03353  
Fishes from the greatest depths

*En* 60-7221. Available from the Ichthyological Laboratory, USFWS, U.S. National Museum, Washington, D.C.

- Rass, T. S.** (d.u.)\* M  
8-03354  
The deepwater fishes of the Kurile Kamchatka Trench

*En* 59-2894UL. Available from the Ichthyological Laboratory, USFWS, U.S. National Museum, Washington, D.C.

- Svetovidov, A. N.** (d.u.)\* M  
8-03355  
A review of the European species of the genus *Trigla*. Pisces Triglidae

*En* 1936 Svetovidov, A. N. Available from the Ichthyological Laboratory, USFWS, U.S. National Museum, Washington, D.C.

- U.K. MAFF & Department of Agriculture & Fisheries for Scotland** (1962) M  
8-03356  
*Fish Stk Rec.*, 1961 : 57 p.

Summarizes size and age compositions of *Pleuronectes platessa*, *Solea vulgaris*, *Gadus callarias*, *G. aeglefinus*, *G. merlangus*, *G. virens*, *Clupea harengus* catches by English vessels in N. Atlantic and Arctic waters. Summarizes samples, catches per unit effort, conversion tables, and gives short account of condition of each stock sampled.

- Talbot, F. H. & M. J. Penrith** (1962) M  
8-03357  
*Publ. Oceanogr. Dep. Univ. Cape Town*, (4)  
*Thunnus obesus* Lowe in South Africa

- Dawson, C. E.** (1962) M  
8-03358  
*Copeia*, (1) : 138-46

Notes on anomalous American Heterosomata with descriptions of five new records

Literature is reviewed. Specimens of *Paralichthys dentatus* (L.), *Trinectes maculatus* (Bloch & Schneider) and *Symphurus plagiatus* (L.) exhibiting abnormal coloration described and ill. Instance of reversed scalation in *T. maculatus* is described. Frequency of anomalous flatfishes in respect to type of anomaly, geography and phylogenetic group is discussed.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

M

**Berry, F. H. & L. R. Rivas** (1962)

8-03359

*Copeia*, (1) : 152-60

Data on six species of needlefishes (Belonidae) from the western Atlantic

*Belone argala* Le Sueur, *Strongylura notata* (Poey), *S. timucu* (Walbaum), *Tylosurus acus* (Lacépède), *T. raphidoma* (Ranzani), and *Ablennes hians* (Valenciennes). Data are given on variations in numerable characters and ontogenetic changes in morphology and morphometry. Generic relationships, spp. differences, and ecological notes are discussed.

M

**Squire, J. L., Jr.** (1962)

8-03360

*Copeia*, (1) : 216-9

Marlin and swordfish in oceanic waters of the western North Atlantic

During period 1957 to 1960, the US Bureau of Commerical Fisheries, Gloucester, Massachusetts, conducted a program of explorations to investigate pelagic resources of oceanic northwestern Atlantic, by research vessel 'Delaware'. Reviews records of *Tetrapturus*, *Makaira* and *Xiphias* and oceanographic characteristic.

M

**Morrow, J. E.** (1962)

8-03361

*Copeia*, (1) : 220-1

Variation in the form of the pectoral girdle in the blue marlin

Ci 585020. Writer sought to show that form of pectoral girdle, particularly cleithrum, could be used to distinguish between the blue marlins, *Makaira nigricans* Lacépède, of the Atlantic and the Pacific Oceans. Observed differences between Atlantic and Pacific types might be related to the sex of the individuals, the females being the Pacific form, the males the Atlantic. Dr. C. R. Robins suggested that the size of the individual might also be involved.

M

**Rosa, H., Jr. (Ed.)** (1963)

8-03362

*FAO Fish. Rep.*, (6), vol. 2 : 101-975

Proceedings of the world scientific meeting on the biology of tunas and related species, La Jolla, California, U.S.A., 2-14 July 1962

Pr 61-228me. Co 62-05722. Species synopsis. Contains 8-03363 to 8-03396.

M

**Calkins, T. P. & W. L. Klawe** (1963)

8-03363

*FAO Fish. Rep.*, (6), vol. 2 : 130-46

Synopsis of biological data on black skipjack *Euthynnus lineatus* Kishinouye 1920

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

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- Demir, M.** (1963) M  
8-03364  
*FAO Fish. Rep.*, (6), vol. 2 : 101-29  
 Synopsis of biological data on bonito *Sarda sarda* (Bloch) 1793

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Uchida, R. N.** (1963) M  
8-03365  
*FAO Fish. Rep.*, (6), vol. 2 : 241-73  
 Synopsis of biological data on frigate mackerel *Auxis thazard* (Lacépède) 1802 (Pacific Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Yoshida, H. O. & T. Otsu** (1963) M  
8-03366  
*FAO Fish. Rep.*, (6), vol. 2 : 274-318  
 Synopsis of biological data on albacore *Thunnus germon* (Lacépède) 1800 (Pacific and Indian Oceans)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Williams, F.** (1963) M  
8-03367  
*FAO Fish. Rep.*, (6), vol. 2 : 157-66  
 Synopsis of biological data on frigate mackerel *Auxis thazard* (Lacépède) 1802 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Williams, F.** (1963) M  
8-03368  
*FAO Fish. Rep.*, (6), vol. 2 : 167-79  
 Synopsis of biological data on little tuna *Euthynnus affinis* (Cantor) 1850 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- Bell, R. R.** (1963) M  
8-03369  
*FAO Fish. Rep.*, (6), vol. 2 : 380-421  
 Synopsis of biological data on California bluefin tuna *Thunnus saliens* Jordan and Evermann 1926

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Tiews, K.** (1963)M  
8-03370*FAO Fish. Rep.*, (6), vol. 2 : 422-81Synopsis of biological data on bluefin tuna *Thunnus thynnus* (Linnaeus) 1758 (Atlantic and Mediterranean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Alverson, F. G. & C. L. Peterson** (1963)M  
8-03371*FAO Fish. Rep.*, (6), vol. 2 : 482-514Synopsis of biological data on bigeye tuna *Parathunnus sibi* (Temminck and Schlegel) 1844

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Kikawa, S. et al.** (1963)M  
8-03372*FAO Fish. Rep.*, (6), vol. 2 : 147-56Synopsis of biological data on bonito *Sarda orientalis* Temminck and Schlegel 1842

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Yamanaka, H. et al.** (1963)M  
8-03373*FAO Fish. Rep.*, (6), vol. 2 : 180-217Synopsis of biological data on kuromaguro *Thunnus orientalis* (Temminck and Schlegel) 1842 (Pacific Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Kikawa, S. et al.** (1963)M  
8-03374*FAO Fish. Rep.*, (6), vol. 2 : 218-40Synopsis on the biology of little tuna *Euthynnus yaito* Kishinouye 1923

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Mimura, K. et al.** (1963)M  
8-03375*FAO Fish. Rep.*, (6), vol. 2 : 319-49Synopsis of biological data on yellowfin tuna *Neothunnus macropterus* Temminck and Schlegel 1842 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.



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- M  
8-03376
- Mimura, K. et al.** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 350-79  
 Synopsis on the biology of bigeye tuna *Parathunnus mebachi* Kishinouye 1923 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M  
8-03377
- Schaefer, M. B., G. C. Broadhead & C. J. Orange** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 538-61  
 Synopsis on the biology of yellowfin tuna *Thunnus (Neothunnus) albacares* (Bonnaterre) 1788 (Pacific Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M  
8-03378
- Robins, J. P.** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 562-87  
 Synopsis of biological data on bluefin tuna *Thunnus thynnus maccoyii* (Castelnaue) 1872

Compiles information on identity, distribution, bionomics and life history, population, exploitation, protection and management of the sp.

- M  
8-03379
- de Jaeger, B.** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 588-607  
 Synopsis of biological data on bluefin tuna *Thunnus thynnus orientalis* (Temminck and Schlegel) 1842, longfin tuna *Thunnus alalunga* (Bonnaterre) 1788, yellowfin tuna *Thunnus albacares* (Bonnaterre) 1788 and bigeye tuna *Thunnus obesus* (Lowe) 1839 (South Africa)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M  
8-03380
- Talbot, F. H. & M. J. Penrith** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 608-46  
 Synopsis of biological data on species of the genus *Thunnus (sensu lato)* (South Africa)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M  
8-03381
- Jones, S. & E. G. Silas** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 663-94  
 Synopsis of biological data on skipjack *Katsuwonus pelamis* (Linnaeus) 1758 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Waldron, K. D.** (1963)M  
8-03382*FAO Fish. Rep.*, (6), vol. 2 : 695-748Synopsis of biological data on skipjack *Katsuwonus pelamis* (Linnaeus) 1758 (Pacific Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Idyll, C. P. & D. de Sylva** (1963)M  
8-03383*FAO Fish. Rep.*, (6), vol. 2 : 749-54Synopsis of biological data on albacore *Thunnus alalunga* (Gmelin) 1788 (western Atlantic)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Idyll, C. P. & D. de Sylva** (1963)M  
8-03384*FAO Fish. Rep.*, (6), vol. 2 : 755-60Synopsis of biological data on bonito *Sarda sarda* (Bloch) 1793 (western Atlantic)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Idyll, C. P. & D. de Sylva** (1963)M  
8-03385*FAO Fish. Rep.*, (6), vol. 2 : 761-70Synopsis of biological data on the blackfin tuna *Thunnus atlanticus* (Lesson) 1830 (western Atlantic)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Idyll, C. P. & D. de Sylva** (1963)M  
8-03386*FAO Fish. Rep.*, (6), vol. 2 : 771-7Synopsis of biological data on yellowfin tuna *Thunnus albacares* (Bonnaterre) 1788 (western Atlantic)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

**Idyll, C. P. & D. de Sylva** (1963)M  
8-03387*FAO Fish. Rep.*, (6), vol. 2 : 778-81Synopsis of biological data on the frigate mackerel *Auxis thazard* (Lacépède) 1802 (western Atlantic)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

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- M  
8-03388
- Jones, S.** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 782-810  
 Synopsis of biological data on the long corseletted frigate mackerel *Auxis thynnoides* Bleeker 1855

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M  
8-03389
- Silas, E. G.** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 811-33  
 Synopsis of biological data on double-lined mackerel *Grammatorcynus bicarinatus* (Quoy and Gaimard) (Indo-Pacific)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M  
8-03390
- Silas, E. G.** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 834-61  
 Synopsis of biological data on oriental bonito *Sarda orientalis* (Temminck and Schlegel) 1842 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M  
8-03391
- Jones, S.** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 862-76  
 Synopsis of biological data on the northern bluefin tuna *Kishinoella tonggol* (Bleeker) 1851 (Indian Ocean)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M  
8-03392
- Silas, E. G.** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 877-99  
 Synopsis of biological data on dogtooth tuna *Gymnosarda unicolor* (Rüppell) 1838 (Indo-Pacific)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

- M  
8-03393
- Postel, E.** (1963)  
*FAO Fish. Rep.*, (6), vol. 2 : 515-37  
 Exposé synoptique des données biologiques sur la bonite à ventre rayé *Katsuwonus pelamis* (Linné) 1758 (Synopsis of biological data on skipjack *Katsuwonus pelamis* (Linné) 1758)

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

M

**Marchal, E.** (1963)

8-03394

*FAO Fish. Rep.*, (6), vol. 2 : 647-62

Exposé synoptique des données biologiques sur la thonine *Euthynnus alleteratus* (Rafinesque) 1810 (ouest Atlantique et Méditerranée) (Synopsis of biological data on little tuna *Euthynnus alleteratus* (Rafinesque) 1810 (west Atlantic and Mediterranean) )

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

M

**Vilela, H. & F. Frade** (1963)

8-03395

*FAO Fish. Rep.*, (6), vol. 2 : 900-30

Exposé synoptique sur la biologie du thon à nageoires jaunes *Neothunnus albacora* (Lowe) 1839 (Atlantique orientale) (Synopsis of biological data on yellowfin tuna *Neothunnus albacora* (Lowe) 1839 (eastern Atlantic) )

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

M

**Postel, E.** (1963)

8-03396

*FAO Fish. Rep.*, (6), vol. 2 : 931-75

Exposé synoptique sur la biologie du germon *Germo alalunga* (Cetti) 1777 (Atlantique orientale) (Synopsis of biological data on albacore *Germo alalunga* (Cetti) 1777 (eastern Atlantic) )

Compiles information on identity, distribution, bionomics and life history, population and exploitation of the sp.

M

**Templeman, W. & A. M. Fleming** (1962)

8-03397

*J. Fish. Res. Bd Can.*, 19 (3) : 445-87

Cod tagging in the Newfoundland area during 1947 and 1948

4200 cod tagged in Newfoundland and Labrador inshore areas and on the Grand Bank and St. Pierre Bank. Migrations of cod from tagging in the inshore fishing areas off Nutak and Domino in Labrador, off Englee, St. John's Burin and Corbin, and Lark Harbour in Newfoundland and on the Grand Bank and St. Pierre Bank. Cod caught inshore by commercial fishermen and offshore by research otter trawler were tagged, some with an external, combination cellulose nitrate and aluminium disc bachelor-button tag inserted through the opercular bone, some with a 2-inch flat cellulose nitrate tag inserted in the body cavity through a posterior slit in the body wall. Internal tags gave fewer returns than external tags in tagging year, but opposite was true for years following. In years after tagging year percentage recaptures of smaller cod were in excess of those of larger cod. Although cod were recaptured almost immediately after being tagged from traps, those tagged from handlines and linetrawls were not caught by baited hooks for 7-10 days afterwards. Inverse relationship exists between length of otter-trawl drag from which fish were tagged and percentage recaptures.



- Liberman, E. A., L. M. Tsofina & I. M. Glagoleva** (1962) MG  
8-03398  
*Dokl. Akad. Nauk SSSR*, 145 (4) : 945-8

Generatsiia potentsialov deistviia myshechnymi voloknami rakoobraznykh v rastvorakh, sodershashchikh smesi  $BaCl_2$  i  $SrCl_2$  (Generation of action potentials by muscular fibres of Crustacea in solutions containing mixtures of  $BaCl_2$  and  $SrCl_2$ )

- Seppovaara, O.** (1962) MF  
8-03399  
*Ann. zool. Soc. Vanamo*, 24 (1) : 86 p.

Zur Systematik und Ökologie des Lachses und der Forellen in den Binnengewässern Finnlands (On the systematics and ecology of salmon and trout in Finnish inland waters). Su

- Rosenstiel, E.** (1962) MF  
8-03400  
*New Scient.*, 15 (304) : 578  
 Built-in obsolescence and living organisms

Le 8-02433.

- Behnke, R. J., T. P. Koh & P. R. Needham** (1962) MF  
8-03401  
*Copeia*, (2) : 400-7

Status of the landlocked salmonid fishes of Formosa with a review of *Oncorhynchus masou* (Brevoort)

5 salmonid specimens collected from mountain stream in 1960 suggest close affinity to *Oncorhynchus masou* and are considered to represent a sub-sp. In 1919, Jordan & Oshima described *Salmo formosanus* from Formosa. Specimen at Stanford Univ., listed as paratype of *S. formosanus*, has character found in no spp. of *Oncorhynchus*. May actually represent sp. of *Salmo*. Type specimen of *S. formosanus* cannot be located. List of taxonomic characters is given for *O. masou*.

- Hellier, T. R., Jr. & H. D. Hoese** (1962) MF  
8-03402  
*Copeia*, (2) : 453-4

Note on the schooling behavior of the striped mullet, *Mugil cephalus*, in Texas

Ci 61-06464. Unusually large, dense school observed in Mesquite Bay, a small—13.5 square miles—shallow marine lagoon near Rockport, during early 1958. Hydrography and ecology of area recently described. Effort made to estimate size of school by mark-and-recovery method.

- Strahan, R.** (1962) MF  
8-03403  
*Copeia*, (2) : 471-3

Survival of the hag, *Paramyxine atami* Dean, in diluted sea water

Ci 583669, 582943 and 61-04314. Specimens selected from larger commercial catch taken in 50 m off Izumozaki on 14-15 Jun. 1961.

- Gosline, W. A.** (1962) MF  
*Copeia*, (2) : 473-5 8-03404  
 Reviews and comments—Some recent Japanese ichthyological works

- Brett, J. R.** (1962) MF  
*Copeia*, (2) : 475-6 8-03405  
 Reviews and comments—Rate of metabolism and food requirements of fishes

Re 61-06950.

- Manter, H. W.** (1962) MF  
*Copeia*, (2) : 476-7 8-03406  
 Reviews and comments—Monogenetic trematodes, their systematics and phylogeny

Re 62-04446.

- Cooper, E. L.** (1962) MF  
*Copeia*, (2) : 477-8 8-03407  
 Reviews and comments—The salmon

Re 59-4991.

- Marshall, A. J.** (Ed.) (1962) MF  
 London, Macmillan 8-03408  
 Parker and Haswell's textbook of zoology (7th edn.)  
 Volume 2—Chordates—, almost completely revised.

- Piggins, D. J.** (1962) MF  
*Nature, Lond.*, 195 (4845) : 1017-8 8-03409  
 Thyroid feeding of salmon parr

Ci 61-11606. Report on experiments with fresh thyroid feeding to *Salmo salar* in 1961 by Salmon Research Trust of Ireland, at Newport, Co. Mayo. Effect on maturation and survival.

- Ishibashi, T.** (1962) MF  
*Gen. comp. Endocr.*, 2 : 415-24 8-03410  
 Electrical activity of the caudal neurosecretory cells in the eel *Anguilla japonica* with special reference to synaptic transmission

Account of study designed to investigate both the morphological and electrophysiological evidence for the presence of synapses between neurosecretory cells and other nerve cells, and for the conduction of action potentials in the neurosecretory neuron.

# AQUATIC STOCKS

**Robertson, O. H. & B. C. Wexler** (1962) MF  
8-03411  
*Gen. comp. Endocr.*, 2 : 458-72

Histological changes in the organs and tissues of senile castrated kokanee salmon (*Oncorhynchus nerka kennerlyi*)

Finds degenerative changes in the pituitary, stomach and intestine, liver, kidney, spleen, thymus, thyroid, cardiovascular system and muscle, while the adrenocortical tissue and pancreas showed hyperplasia and hypertrophy. Changes resemble alterations occurring in spawning salmon, which suggests the possibility that the degenerative changes accompanying sexual maturation and spawning represent an acceleration of the aging process. Discusses relationship of adrenocortical cell hyperplasia to this process.

**Cahn, P. H. & E. Shaw** (1962) MF  
8-03412  
*Copeia*, (1) : 109-14

The first demonstration of lateral line cupulae in the Mugiliformes

Cupulae in larval *Menidia* are described. Table of presence of cupulae in other teleosts is incl.

**Warner, K.** (1962) MF  
8-03413  
*Copeia*, (1) : 131-8

The landlocked salmon spawning run at Cross Lake Thoroughfare, Maine

Spawning run of *Salmo salar* from 1953 to 1958. Sex ratio of spawners: tag return data indicated that some salmon spawn in consecutive years, but the majority spawn in alternate years.

**Whitley, E. C.** (1962) MF  
8-03414  
*Copeia*, (1) : 220

Occurrence of breeding gulf pipefish, *Syngnathus scovelli*, in the inland fresh waters of Louisiana

Author collected *S. scovelli* from fresh water in Lake Saint John near Ferriday, Louisiana, 1960.

**Legendre, V.** (1962) MF  
8-03415  
*Copeia*, (1) : 221-2

Author and type of *Lampetra*

**Bardach, J. E.** (1962) MF  
8-03416  
*Copeia*, (1) : 234-6

Reviews and comments—Experimental ecology of the feeding of fishes

Re 61-10823.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

**Farris, D. A.** (1962)

MF  
8-03417

*Copeia*, (1) : 236-7

Reviews and comments—Experimental ecology of the feeding of fishes

Re 61-10823.

**de Sylva, D. P.** (1962)

MF  
8-03418

*Copeia*, (1) : 241-2

Reviews and comments—Living fishes of the world

Re 8-02415.

**Gunter, G.** (1962)

MF  
8-03419

*Copeia*, (1) : 243

Reviews and comments—Ecology of inland waters and estuaries

Re 61-10581.

**Pearcy, W. G.** (1962)

MF  
8-03420

*Bull. Bingham oceanogr. Coll.*, 18 (1) : 1-15

Ecology of an estuarine population of winter flounder, *Pseudopleuronectes americanus* (Walbaum)—1. Hydrography of the Mystic River estuary. Ru

Issued also as: *Contr. Mar. Res. Lab. Univ. Conn.*, (16).

**Pearcy, W. G.** (1962)

MF  
8-03421

*Bull. Bingham oceanogr. Coll.*, 18 (1) : 16-38

Ecology of an estuarine population of winter flounder, *Pseudopleuronectes americanus* (Walbaum)—2. Distribution and dynamics of larvae. Ru

Co 8-03420. Issued also as: *Contr. Mar. Res. Lab. Univ. Conn.*, (17).

**Pearcy, W. G.** (1962)

MF  
8-03422

*Bull. Bingham oceanogr. Coll.*, 18 (1) : 39-64

Ecology of an estuarine population of winter flounder, *Pseudopleuronectes americanus* (Walbaum)—3. Distribution, abundance, growth and production of juveniles; survival of larvae and juveniles. Ru

Co 8-03421. Issued also as: *Contr. Mar. Res. Lab. Univ. Conn.*, (18).

**Pearcy, W. G.** (1962)

MF  
8-03423

*Bull. Bingham oceanogr. Coll.*, 18 (1) : 65-78

Ecology of an estuarine population of winter flounder, *Pseudopleuronectes americanus* (Walbaum)—4. Food habits of larvae and juveniles. Ru

Co 8-03422. Issued also as: *Contr. Mar. Res. Lab. Univ. Conn.*, (19).



# AQUATIC STOCKS

- Cold Spring Harbor, N.Y. Biological Laboratory** (1961)\*  
*Cold Spr. Harb. Symp. quant. Biol.*, 25 : 530  
 Biological clocks  
 Contains 61-12706 and 61-12707.
- MF  
8-03424
- Spanner, D. C.** (1961)  
*New Phytol.*, 60 (3) : 403-4  
 [Review]  
 Re 8-03424.
- MF  
8-03425
- Zotin, A. I. & B. F. Poglazov** (1962)  
*Dokl. Akad. Nauk SSSR*, 143 (5) : 1233-6  
 Vozbudimost' poverkhnostnogo sloia tsitoplazmy i droblenie iaits ryb i amfibii (Excitability of the superficial protoplasm layer and egg segmentation in fish and amphibians)
- MF  
8-03426
- Polikarnov, G. G. & V. N. Ivanov** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (1) : 219-22  
 Povrezhdaushchee deistvie strontsiia-90-ittriiia-90 na rannii period razvitiia barabuli zelenushki, stavridy i khamsy (The injurious effect of  $Sr^{90}$ - $Y^{90}$  on the early development period in *Mullus barbatus ponticus*, *Crenilabrus tinca*  $\times$  *C. quinque maculatus*, *Trachurus trachurus* and *Engraulis encrasicolus*)
- MF  
8-03427
- Chulitskaia, E. V.** (1962)  
*Dokl. Akad. Nauk SSSR*, 144 (1) : 245-7  
 Izuchenie indutsiruiushchego deistviia mezodermy na material slukhovogo puzyr'ka u osetrovnykh ryb i amfibii (A study of the inductive effect of the mesoderm on the material of the auditory vesicle in Acipenseridae fishes and amphibians)
- MF  
8-03428
- Zubova, S. E.** (1962)  
*Dokl. Akad. Nauk SSSR*, 145 (3) : 694-7  
 Kharakteristika variabil'nosti skorosti razvitiia zarodyshei osetrovnykh ryb (Type of variation of development rate in Acipenseridae embryos)
- MF  
8-03429
- Detlaf, T. A. & S. E. Zubova** (1962)  
*Dokl. Akad. Nauk SSSR*, 143 (3) : 746-8  
 Sootnoshenie prodolzhitel'nosti peridov sozrevaniia i zarodyshevogo razvitiia u osetra i sevrugi (A correlation between the periods of maturation and embryonic development in *Acipenser guldenstaedtii* and *A. stellatus*)
- MF  
8-03430
- Vatova, A.** (1962)  
*J. Cons.*, 27 : 109-15  
 The salt-water fish farms of the north Adriatic and their fauna  
 WFA 13 (4) : 3. Fish culture—brackish water.
- MF  
8-03431

**Mohr, H.** (1960)MF  
8-03432*Prot. FischTech.*, 31 (7) : 121-9

Aquarienversuche über die Scheuchwirkung eines Vorhangs aus Luftblasen bei einigen Süßwasserfischen, besonders bei Aalen (Aquarium experiments on the frightening effect of an air-bubble curtain on some species of fresh water fish, especially eel)

WFA 13 (4) : 17. Experiments carried out with *Salmo gairdneri*, *Abramis brama*, *Leuciscus rutilus*, *L. idus*, *Carassius vulgaris*, *Acerina cernua*, *Anguilla vulgaris*.

**de Wit, J. J. D.** (1962)F  
8-03433*Canad. J. Zool.*, 40 (3) : 421-4

Hybridization experiments in acheilognathine fishes (Cyprinidae, Teleostei) —The interspecific hybrids between *Acheilognathus lanceolatus* and *Acheilognathus tabira*

In order to establish the presence of gametic compatibility and the degree of genomic compatibility, both spp. were artificially crossed.

**de Wit, J. J. D.** (1962)F  
8-03434*Canad. J. Zool.*, 40 (3) : 425-30

Hybridization experiments in acheilognathine fishes (Cyprinidae, Teleostei) —Fertile intrageneric hybrids between female *Acheilognathus lanceolatus* and male *Acheilognathus limbatus* from Japan

Co 8-03433. Reports upon the  $F_1$  hybrid between the 2 spp. and the  $F_2$  progenies which were obtained by crossing male and female  $F_1$  hybrids back to female and male *A. lanceolatus* respectively.

**Mahon, E. F., W. S. Hoar & S. Tabata** (1962)F  
8-03435*Canad. J. Zool.*, 40 (3) : 449-64

Histophysiological studies of the adrenal tissues of the goldfish

Evaluation of the effects of sudden temperature changes on the histology of the adrenal.

**Delco, E. A., Jr.** (1962)F  
8-03436

Thesis, Univ. of Texas, 226 p.

Reproductive behavior and sexual isolating mechanisms between two sympatric cyprinid fishes

DA 23 (1) : 360. 2 spp. studied were *Notropis lutrensis* and *N. venustus*. Both produced similar results in electrophoretic patterns, chromosome number, ecological requirements, color preference, incubation time, movement, and substrate preference. Food habits were similar. Courtship acts similar; however, frequency of each activity differs.

F

**Francois, D. D.** (1962)

8-03437

Thesis, Cornell Univ., USA, 154 p.

A revision of the Australian cray-fish genus *Euastacus* (Decapoda, Parastacidae)

DA 23 (1) : 362. Revision incl. 23 spp., 5 of which are described as new. Other new spp. indicated but not described because of inadequate material.

F

**Legault, R. O.** (1962)

8-03438

Thesis, Univ. of Michigan, 116 p.

The early embryology of teleosts with special reference to *Percina caprodes*, *Brachydanio rerio* and *Osmerus mordax*DA 23 (1) : 365. Basic features in early embryology were identified in study of their development, and correlated with the facts reported in the literature on them and other teleosts and the holostean, *Amia calva*.

F

**Miller, H. C.** (1962)

8-03439

Thesis, Cornell Univ., USA, 134 p.

The behavior of *Lepomis gibbosus* (Linnaeus) with notes on the behavior of other species of *Lepomis*, *Elassoma evergladei*, and *Enneacanthus gloriosus*

DA 23 (1) : 365. Maintenance behavior, agonistic behavior; social groups and reproductive behavior are described.

F

**Schneider, H.** (1962)

8-03440

*Copeia*, (2) : 336-8

The labyrinth of two species of drumfish (Sciaenidae)

Anatomical study of labyrinth of *Aplodinotus grunniens* and *Micropogon furnieri*. Since sound production is common in both spp., development of hearing part of labyrinth leads to conclusion that they may well be able to utilize their acoustic signals.

F

**Barlow, G. W.** (1962)

8-03441

*Copeia*, (2) : 346-60Ethology of the Asian teleost, *Badis badis*—4. Sexual behavior

Judging from elaborate spawning behavior, its general habits and its appearance, as well as its distribution, it is most likely related to anabantoid fishes.

F

**Gordon, M. S. & D. E. Rosen** (1962)

8-03442

*Copeia*, (2) : 360-8A cavernicolous form of the poeciliid fish *Poecilia spheonops* from Tabasco, Mexico

First known cavernicolous population described from a calcium sulfate saturated cave stream in Tabasco, Mexico. Detailed physical description of cave is presented, also list of other organisms so far found within the cave and its stream.

Minckley, W. L. & J. E. Craddock (1962)

F  
8-03443

*Copeia*, (2) : 369-77

A new species of *Phenacobius* (Cyprinidae) from the upper Tennessee River system

New sp. of fine-scaled minnow previously identified with *P. catastomus* Jordan, is described and compared with other southeastern representatives of the genus—*P. uranops* Cope, *P. teratulus* Cope, and *P. catastomus*. Possible origins and relationships of *P. crassilabrum*, and of genus *Phenacobius*, are discussed.

Holčik, J. & J. J. Duyvené de Wit (1962)

F  
8-03444

*Copeia*, (2) : 377-90

Characteristics of *Rhodeus ocellatus* and *Acheilognathus lanceolatus* hybrids

Taxonomic characteristics of both reciprocals of artificially produced hybrids are described. Both kinds of intergeneric hybrids were raised to adult stage. All showed a male phenotype, except for some neuters.

Minckley, W. L. (1962)

F  
8-03445

*Copeia*, (2) : 391-6

Two new species of fishes of the genus *Gambusia* (Poeciliidae) from north-eastern Mexico

*G. longispinis*, restricted to semi-isolated intermontane basin surrounding Cuatro Ciénegas, Coahuila, Mexico, and *G. marshi* found throughout Rio Salado basin of northern Mexico, are described. Former is member of *G. nobilis* sp. group of Texas and northern Mexico, whereas the latter belong to subgenus *Heterophallina*.

Hubbs, C. & E. A. Delco, Jr. (1962)

F  
8-03446

*Copeia*, (2) : 396-400

Courtship preferences of *Gambusia affinis* associated with the sympatry of the parental populations

Males isolated in observational tanks. Two females were introduced into tank simultaneously. Males' courtship activities were recorded. Those reared in isolated cultures preferred females of their own sp. Males reared in mixed cultures are less discriminating than those reared in isolation, but no interspecific copulations were observed in sympatric stocks reared in mixed cultures.

Miller, R. J. (1962)

F  
8-03447

*Copeia*, (2) : 407-17

Reproductive behavior of the stoneroller minnow, *Camptostoma anomalum pullum*

Nest-building, territory defense, and spawning.



- F  
8-03448
- Bartholomew, M. A., J. DiVall & J. E. Morrow** (1962)  
*Copeia*, (2) : 449-50  
 Silver pike, an atypical *Esox lucius*, in Alaska, a first record

Ci 61-07183. During ecological survey of fishes of the upper Tanana and Yukon River basins in Alaska, three unusually pigmented pike were taken at mouth of the Kandik River, on the Yukon, in Aug. 1961. Present specimens appear to represent first record of this mutant from west of Rocky Mountains.

- F  
8-03449
- Miller, R. J.** (1962)  
*Copeia*, (2) : 450-2  
 Sexual development and hermaphroditism in the hybrid cyprinid, *Notropis cornutus* × *N. rubellus*

Raney (1940) reported hybrids of both sexes spawning with opposite sexes of *N. cornutus* in the typical *N. cornutus* manner, and presented data on the sex ratio and gonad conditions. Author investigated reproductive behavior and ecology of 3 forms in the same population at Catatunk Creek at Candor, New York, during 1959, 1960 and 1961, and examined the gonads of specimens collected during May and June, when they were still in breeding condition, and during May and June from 1939 to 1949.

- F  
8-03450
- Qayyum, A. & S. Z. Qasim** (1962)  
*Copeia*, (2) : 465-7  
 Behavior of the Indian murrel, *Ophicephalus punctatus*, during brood care

Ci 61-07919. Observations in N. India on families collected from ponds, concluded both sexes take part in caring for young. Studies on behavior of parents made by keeping families under observation for several days.

- F  
8-03451
- Brown, B. E.** (1962)  
*Copeia*, (2) : 469-71  
 Occurrence of the walleye, *Stizostedion vitreum*, in Alabama south of the Tennessee Valley

Rotenone population studies since 1949 by Auburn University Agricultural Experiment Station and Alabama Department of Conservation have shown walleye to be present throughout central and southern Alabama. Surveys recorded in annual reports of the Alabama Department of Conservation from 1949 to 1959.

- FG  
8-03452
- Betz, T. W.** (1962)  
*Copeia*, (2) : 284-7  
 Surgical anesthesia in reptiles, with special reference to the water snake, *Natrix rhombifera*

Eighteen *Natrix* from wildlife reserve in S.E. Missouri injected with nembutal or surital. Literature reports of use of ether, chloroform, nembutal, surital, pentothal, MS-222, urethane, decamethonium iodide, and tubocurarine chloride as anesthetics in reptiles are compared.

**Needham, P. R.** (1962)

F  
8-03453

S. Francisco, Holden-Day Inc., 120 p.

A guide to the study of fresh-water biology

Facilitates recognition of fresh-water organisms in field and laboratory. Completely revised, plates, glossary of terms, and material on laboratory procedures, sampling methods and equipment.

**Hickling, C. F.** (1962)\*

F  
8-03454

London, Faber & Faber, 295 p.

Fish culture

**McConnell, R.** (1962)

F  
8-03455

*New Scient.*, 15 (305) : 638-9

Fish culture: its history and techniques

Re 8-03454.

**Zandee, D. I.** (1962)

F  
8-03456

*Nature, Lond.*, 195 (4843) : 814-5

Lipid metabolism in *Astacus astacus* (L.)

Work concerned with possible biosynthesis of cholesterol.

**Erasmus, D. A.** (1962)

F  
8-03457

*Nature, Lond.*, 195 (4843): 828-9

Distribution of certain strigeid trematodes in Great Britain

Over past eight years, parasitological studies on invertebrate fauna of freshwaters in Glamorgan, South Wales, have shown larval stage of genus *Apatemon* to be quite widely distributed in leeches—particularly *Erpobdella*—and in snails, especially *Lymnaea pereger*.

**Branson, B. A. & G. A. Moore** (1962)

F  
8-03458

*Copeia*, (1) : 1-108

The lateralis components of the acoustico-lateralis system in the sunfish family Centrarchidae

Materials and methods ; distribution of external neuromasts ; comparison with other taxa ; osteological components of the lateral-line system ; comparison of *Ambloplites* with other Centrarchidae ; comparison of centrarchid osteological components with those of other taxa ; histological observations ; histology of canals and canal neuromasts ; innervation of neuromasts ; phylogeny of the Centrarchidae ; taxonomic implications ; suggestions for further study.

- F  
8-03459
- Crossman, E. J.** (1962)  
*Copeia*, (1) : 114-23  
 The redbfin pickerel, *Esox a. americanus* in North Carolina

Data on sex ratio, sex differentiation, spawning and egg production, food, growth and parasites based on 237 specimens are presented. Distribution in N. Carolina is summarized using museum collections and literature. Color and meristic descriptions are given as are other characteristics useful in distinguishing this sp. from the sympatric *Esox niger* at various sizes.

- F  
8-03460
- Blackett, R. F.** (1962)  
*Copeia*, (1) : 124-30  
 Some phases in the life history of the Alaskan blackfish, *Dallia pectoralis*

New inland record for distribution established in Big Eldorado Creek in Tanana River drainage of central interior Alaska. Fish were examined to gain knowledge of movements, age and growth, and reproductive behavior.

- F  
8-03461
- New, J. G.** (1962)  
*Copeia*, (1) : 147-52  
 Hybridization between two cyprinids, *Chrosomus eos* and *Chrosomus neogaeus*

Morphometric study of 12 characteristics of *C. eos*, *C. eos* × *C. neogaeus*, and *C. neogaeus*. Conclusion is that introgression is occurring.

- F  
8-03462
- Packer, W. C.** (1962)  
*Copeia*, (1) : 207-8  
 Aquatic homing behavior in *Taricha rivularis*

Newt able to orient directly to its home area following translocation.

- F  
8-03463
- Hubbs, C. L.** (1962)  
*Copeia*, (1) : 237-8  
 Reviews and comments—Studies on the freshwater fishes of Japan

Re 61-10139 and 61-10140.

- F  
8-03464
- Lillelund, K.** (1961)  
*Arch. Fisch Wiss.*, 12 (1) : 1-128

Untersuchungen über die Biologie und Populationsdynamik des Stintes *Osmerus eperlanus eperlanus* (Linnaeus 1758), der Elbe (Investigations on biology and population dynamics on the smelt, *Osmerus eperlanus eperlanus* (Linnaeus 1758) of the river Elbe) En

Fishing season, by catches, catch per unit effort; spawning season and area, maturity, fecundity, survival, temperature and salinity tolerances, recruitment, age-determination and growth, sex differences, fresh water and marine, yield predictions, predicted effect of dam at Geesthacht.

**Anon. (1962)**

F

*New Scient.*, 15 (306) : 662

8-03465

Notes and comments—Trout show susceptibility to cancer-producing agents

Possible use of rainbow trout for screening of carcinogens, particularly in food, is forecast by the US Bureau of Sport Fisheries and Wildlife.

**Gery, J. (1961)**

F

*Bonn. zool. Beitr.*, 12 (3-4) : 332-42

8-03466

*Pterohemiodus luelingi* sp. nov., un curieux poisson characoïde à nageoire dorsale filamenteuse, avec une clé des genres d'Hemiodontinae (Ostariophysi-Erythrinidae) (*Pterohemiodus luelingi* sp. nov., a curious characoid fish with filamentous dorsal fin, with a key to the genera of Hemiodontinae (Ostariophysi-Erythrinidae) )

Ill. description of specimen from Peruvian Amazon collection of K. H. Lüling.

**Uspenskaia, A. V. (1962)**

F

*Dokl. Akad. Nauk SSSR*, 142 (5) : 1212-5

8-03467

O pitanii monogeneticheskikh sosal'shchikov (On the nutrition of monogenetic trematodes)

**Yu, W. & L. Chun (1962)**

F

*China Reconstructs*, 11 (7) : 28-9

8-03468

Experiments in fish breeding

TA 17 (10) j2650. Brief discussion of experiments at Kwantung Research Institute of Aquatic Products in Canton, China. *Penaeus monodon*, could be made to live in fresh water by gradually decreasing the salinity of sea water during 20 days. Crosses between *Tilapia mossambica* and the carp, silver carp and bighead resulted in a  $F_1$  with the properties of both the male—large size and resistance to cold—and the female parent. Experiments in crossing bighead with silver carp have produced a new variety which grows much more rapidly and spawns more eggs.

**Malacca. Tropical Fish Culture Research Institute (1961?)**

F

*Rep. trop. Fish. Cult. Res. Inst. Malacca*, 1960-61 : 31 p.

8-03469

TA 17 (10) : 2649. Contains information on institute's research programme, incl. i.a., 1. *Tilapia mossambica* hybrid production, 2. the spawning of grass carp, 3. fertilizer trials, 4. selection pressure, 5. botanical studies of phytoplankton and macrophytic vegetation, and 6. comparative studies on the ability of different algal spp. to be digested by *Tilapia mossambica*. Brief discussion on economics of fish culture stresses importance of fertilizing fish ponds with phosphate.



## MISCELLANEOUS AND AUXILIARIES

**Kusakina, A. A.** (1962)

F  
8-03470

*Dokl. Akad. Nauk SSSR*, 144 (5) : 1160-2

Teploustoichnost' myshts kolinesterazy myshechnykh gomogenatov u karasei iz goriachego istochnika i obychnykh rodoemov (Thermostability of muscles and of cholinesterase of muscular homogenates in *Carassius* fishes from thermal springs or common water basins)

**Kulakovskaia, O. P.** (1962)

F  
8-03471

*Dokl. Akad. Nauk SSSR*, 143 (4) : 1001-4

Novyi rod i vid gvozdichnika *BREVISCOLEX orientalis* (Caryophyllaeidae, cestodes) iz ryb basseina Amura (A new genus and species of *BREVISCOLEX orientalis* from fishes of the Amur basin)

**Black, E. C. et al.** (1962)

F  
8-03472

*J. Fish. Res. Bd Can.*, 19 (3) : 409-36

Changes in glycogen, pyruvate and lactate in rainbow trout (*Salmo gairdneri*) during and following muscular activity

Experiments muscular fatigue in 1½-year-old trout carried out at hatchery at Summerland, British Columbia during the summers of 1958 and 1959. Observations made on hemoglobin, water content of muscle and whole blood, muscle and liver glycogen, and pyruvate and lactate in muscle, blood and liver.

**Miller, R. B. & F. Miller** (1962)

F  
8-03473

*J. Fish. Res. Bd Can.*, 19 (3) : 365-75

Diet, glycogen reserves and resistance to fatigue in hatchery rainbow trout. Part 2

Co 59-7514. Violent or prolonged exercise increased blood lactate content confirming earlier findings. In stream tests, two groups of hatchery-raised rainbow trout planted in mountain stream containing resident cutthroat trout. One group had been raised on fortified pelleted ration, other on standard raw liver diet. Adverse environmental conditions did not prolong acclimatization period for the pellet-fed trout, as shown by cessation of mortality at the end of that time. Liver-fed trout continued to die in appreciable numbers until three weeks had elapsed. Appendix table gives summary of Gorge Creek trout plantings in 1952-57.

## MISCELLANEOUS AND AUXILIARIES

**Hubbs, C. L.** (1962)

M  
8-03474

*Copeia*, (2) : 481-2

Editorial notes and news—Death notice

Obituary of Anton Frederik Bruun.

K

8 (3) : 257

- M  
8-03475
- Swallow, J. C.** (1962)  
*Nature, Lond.*, 195 (4844) : 857  
News and views—Henry Bryant Bigelow  
Gold Medal for oceanography.
- M  
8-03476
- Barnes, C. A. & F. A. Richards** (1962)  
*J. Mar. Res.*, 20 (1) : 1-2  
Thomas Gordon Thompson, 1888-1961  
Obituary of this oceanographer.
- M  
8-03477
- Yarham, E. R.** (1961)\*  
*Naut. Mag.*, August: 92-4  
Solving secrets of ocean depths
- M  
8-03478
- Sager, G.** (1961)\*  
*Geogr. Ber.*, 19 (2) : 77-84  
Vier Jahrzehnte Wirken im Dienste der Ozeanographie: Prof. H. U. Sverdrup, 15.11.1888-21.8.1957 (Forty years in the service of oceanography: Prof. H. U. Sverdrup, 15.11.1888-21.8.1957)
- M  
8-03479
- Miles, S.** (1962)  
*New Scient.*, 15 (306) : 671-3  
Physiological problems of deep-sea diving  
Human tissues little affected by increasing pressure. But cavities which contain air or gas—the respiratory system, inner ear spaces, sinuses and digestive tract—are sensitive to pressure changes, and all present special problem for consideration when a deep dive is planned.
- M  
8-03480
- Argentina. Laws, Statutes, etc.** (1962)  
*Bol. ofic. Argent.*, (19.728) : 1  
Decreto N° 36 relativo a la radicación o importación de buques de bandera extranjera clasificados como pesqueros de altura—3 de enero de 1962 (Decree No. 36 relative to the temporary or permanent import of vessels flying foreign flags and classified as high seas fishing vessels—3 January 1962)  
Allows import of such vessels free of customs dues provided they fulfil minimum technical standards. The purpose is to expand the national fishing fleet and so develop the national industry thereby stabilizing the sales prices of fish in the country.
- M  
8-03481
- Australia. Commonwealth. Laws, Statutes, etc.** (1962)  
*Commonw. Aust. Gaz.*, (4) : 240-1  
Order revoking and replacing order dated 24 May 1939, under section 423 of the navigation act 1912-1961—12 January 1962  
Specifies provisions of the navigation act and of regulations made thereunder which shall not apply to fishing boats.

# MISCELLANEOUS AND AUXILIARIES

## New South Wales. Laws, Statutes, etc. (1960)

M  
8-03482

*Act* (48) : 15 p.

Prevention of oil pollution of navigable waters act, 1960: An act relating to the prevention of the pollution of navigable waters by oil; to repeal the oil in navigable waters act, 1927; and for purposes connected therewith—17 November 1960

Detailed provisions respecting discharge of oil into waters, removal of oil pollution, equipment in ships to prevent oil pollution, records, reporting, investigation, etc.

## New South Wales. Laws, Statutes, etc. (1962)

M  
8-03483

*Govt Gaz. N.S.W.*, (14) : 372

Amendment of regulations made under the fisheries and oyster farms act, 1935-1960.—9 February 1962

Inserts regulation No. 159 and amends schedule C of the said act, as amended by subsequent regulations by the substitution for "Sea mullet, including hard-gut and bully (*Mugil dobula*)—13" of "Sea mullet, including hard-gut and bully (*Mugil cephalus*)—12 1/2".

## Australia. Northern Territory. Laws, Statutes, etc. (1961)

M  
8-03484

*Ordinance* (25) : 2 p.

Pearling ordinance 1961: An ordinance to amend the pearling ordinance 1956-1958.—16 August 1961

Relates to conditions of employment of indentured labourers.

## Tasmania. Laws, Statutes, etc. (1961)

M  
8-03485

*Act* (15) : 10 p.

Oil pollution act 1961: An act to prevent the pollution of navigable water with oil.—7 September 1961

Extensive provisions respecting discharge of oil into waters, removal of oil pollution, equipment in ships to prevent pollution, facilities in harbours for disposal of oil, etc.

## Canada. Laws, Statutes, etc. (1961)

M  
8-03486

*Can. Gaz. (II)*, (23) : 1790

SOR/61-530. Notice relating to the propagation of fish in Malpeque Bay, Prince Edward Island, made under the fisheries act—17 November 1961

Concerns Bideford River.

M

**Canada. Laws, Statutes, etc. (1961)**

8-03487

*Can. Gaz. (II), (23) : 1867*

DORS/61-530. Avis concernant la propagation du poisson dans la baie Malpeque, Ile du Prince-Edouard, selon la loi sur les pêcheries—17 novembre 1961 (SOR/61-530. Notice relating to the propagation of fish in Malpeque Bay, Prince Edward Island, made under the fisheries act—17 November 1961)

*Fr 8-03486.*

M

**Canada. Laws, Statutes, etc. (1961)**

8-03488

*Can. Gaz. (II), (23) : 1721*

SOR/61-511. Order in council P.C. 1961-1676 amending the New Brunswick fishery regulations made under the fisheries act—23 November 1961

No person shall fish for, catch, kill or have in possession herring under 4 inches in length, except when they are mixed with herring of greater length and do not exceed twenty-five per cent by volume of the entire lot.

M

**Canada. Laws, Statutes, etc. (1961)**

8-03489

*Can. Gaz. (II), (23) : 1797*

DORS/61-511. Décret C.P. 1961-1676 modifiant le règlement de pêche du Nouveau-Brunswick, en vertu de la loi sur les pêcheries—23 novembre 1961 (SOR/61-511. Order in council P.C. 1961-1676 amending the New Brunswick fishery regulations made under the fisheries act—23 November 1961)

*Fr 8-03488.*

M

**Canada. Laws, Statutes, etc. (1961)**

8-03490

*Can. Gaz. (II), (23) : 1736*

SOR/61-514. Order in council P.C. 1961-1679 amending the whaling regulations made under the whaling convention act—23 November 1961

Concerns limit bag for humpback whales in Greenland waters, fishing for blue whales in the North Pacific area and use of helicopter or other aircraft as whale catcher.

M

**Canada. Laws, Statutes, etc. (1961)**

8-03491

*Can. Gaz. (II), (23) : 1813*

DORS/61-514. Décret C.P. 1961-1679 modifiant le règlement de chasse à la baleine en vertu de la loi sur la convention concernant la chasse à la baleine—23 novembre 1961 (SOR/61-514. Order in council P.C. 1961-1679 amending the whaling regulations made under the whaling convention act—23 November 1961)

*Fr 8-03490.*



# MISCELLANEOUS AND AUXILIARIES

M  
8-03492

**Canada. Laws, Statutes, etc. (1961)**  
*Can. Gaz. (II)*, (24) : 1827

SOR/61-542. Order in council P.C. 1961-1781, amending the British Columbia fishery regulations made under the fisheries act—14 December 1961

Concerns bag limit for herring in the Vancouver Island area and gill-net fishing for salmon in district No. 1.

M  
8-03493

**Canada. Laws, Statutes, etc. (1961)**  
*Can. Gaz. (II)*, (24) : 1908-9

DORS/61-542. Décret C.P. 1961-1781, modifiant le règlement de pêche de la Colombie-Britannique, en vertu de la loi sur les pêcheries—14 décembre 1961 (SOR/61-542. Order in council P.C. 1961-1781, amending the British Columbia fishery regulations made under the fisheries act—14 December 1961)

*Fr* 8-03492.

M  
8-03494

**Chile. Laws, Statutes, etc. (1961)**  
*Diario ofic., Santiago*, (24,908) : 621-3

Decreto número 133 aprobando el reglamento del decreto con fuerza de ley N° 266 de 1960—9 febrero de 1961 (Decree No. 133 approving regulations under decree-law No. 266 of 1960—9 February 1961)

CR 60-9770. In respect of tax exemptions for persons engaged in the fishing industry, including construction or improvement of fishing craft: an encouragement measure.

M  
8-03495

**Chile. Laws, Statutes, etc. (1961)**  
*Diario ofic., Santiago*, (25,093) : 2085

Decreto número 1489 ampliando el contingente de exportación de algas rojas de la variedad "*Gelidium*"—19 de octubre de 1961 (Decree No. 1489 increasing the export quota of red algae of the *Gelidium* variety—19 October 1961)

M  
8-03496

**Chile. Laws, Statutes, etc. (1961)**  
*Diario ofic., Santiago*, (25,111) : 2229-30

Decreto número 605 fijando la tarifa que indica para las faenas de embarque de aceite de pescado por canerías particulares—3 de noviembre de 1961 (Decree No. 605 fixing the rate for the loading of fish oil on board ship from private pipe lines—3 November 1961)

M  
8-03497

**Chile. Laws, Statutes, etc. (1961)**  
*Diario ofic., Santiago*, (25,105) : 2186

Decreto número 1601. Amplía el contingente de exportación de algas marinas variedad "*Gelidium*"—9 de noviembre de 1961 (Decree No. 1601 increasing the export quota of seaweed of the *Gelidium* variety—9 November 1961)

**Chile. Laws, Statutes, etc. (1961)**

M

8-03498

*Diario ofic., Santiago, (25,145) : 171*

Decreto número 1078 aprobando el reglamento sobre concesión de permisos a barcos pesqueros de bandera extranjera que indica para pescar en aguas territoriales chilenas y derogando el decreto supremo No. 946, de 8 octubre de 1956—14 de diciembre de 1961 (Decree No. 1078 approving the regulations governing the grant of permits to fishing vessels flying foreign flags for the purpose of fishing in Chilean territorial waters and rescinding supreme decree No. 946 of 8 October 1958—14 December 1961)

The vessels concerned must be supplying the Chilean market.

**Chile. Laws, Statutes, etc. (1961)**

M

8-03499

*Diario ofic., Santiago, (25,161) : 293*

Decreto número 1101 estableciendo exigencia de guía de libre tránsito para el transporte de pescado extraído en el litoral de la provincia de Atacama—20 de diciembre de 1961 (Decree No. 1101 establishing a free transit permit requirement for the transport of fish caught off the coast of the Province of Atacama—20 December 1961)

To suppress the practice of catching fish by using dynamite.

**Ecuador. Laws, Statutes, etc. (1960)**

M

8-03500

*Reg. ofic. Ecuador, (1091) : 327-9*

Decreto No. 464-c autorizando a naves de bandera extranjera la pesca de explotación en aguas territoriales—4 de marzo de 1960 (Executive decree No. 464-c authorizing craft flying foreign flags to engage in commercial fishing in territorial waters—4 March 1960)

These provisions do not apply to the fishing of cod, shrimp, lobster or whales, all of which are forbidden.

**Ecuador. Laws, Statutes, etc. (1961)**

M

8-03501

*Reg. ofic. Ecuador, (36) : 306*

Resolución reformando el art. 58 de la ley de pesca y cacería marítima—8 de diciembre de 1961 (Resolution amending article 58 of the sea fishing and hunting act—8 December 1961)

Money collected as fisheries taxes or fines shall be spent in the proportion of 40 per cent by the national navy for the purchase of equipment for patrolling territorial waters and 60 per cent to be turned over to the ministry of development for investment in fisheries development.

**France. Laws, Statutes, etc. (1961)**

M

8-03502

*J. off. Répub. franç., (282) : 11036*

Arrêté relatif aux livraisons de sucre dénaturé pour l'alimentation animale—29 novembre 1961 (Order relating to deliveries of denatured sugar for animal feed—29 November 1961)

Prescribes products to be used in denaturing fish meal, starch, etc.

# MISCELLANEOUS AND AUXILIARIES

M  
8-03503

**Greece. Laws, Statutes, etc. (1960)**  
*Ephem. Kybern.*, I (179) : 1883

B. diatagma up'arith. 732 peri apagoreuseos alieias dià kyklikon diktyon (gri-gri) emtòs tou orμου Nauarinou (Royal decree No. 732, prohibiting night and day fishing in Navarino Bay with "gri-gri" nets—29 October 1960). *He*

M  
8-03504

**Greece. Laws, Statutes, etc. (1960)**  
*Ephem. Kybern.*, I (179) : 1884-6

B. diatagma up'arith. 735 peri kanonismou tes alieias dià mechanotraton (Royal decree No. 735, regulating trawl fishing from craft—29 October 1960). *He*

M  
8-03505

**Greece. Laws, Statutes, etc. (1960)**  
*Ephem. Kybern.*, I (191) : 1968

B. diatagma up'arith. 793 peri alieias dià volkon (Royal decree No. 793, concerning fishing with "volkos" nets—14 November 1960). *He*

M  
8-03506

**Greece. Laws, Statutes, etc. (1961)**  
*Ephem. Kybern.*, I (112) : 1091

B. diatagma up'arith. 447 peri alieias di' upobruchiòn tuphekiou (Royal decree No. 447, concerning submarine fishing—25 June 1961). *He*

M  
8-03507

**Guatemala. Laws, Statutes, etc. (1961)**  
*Guatemalteco*, (44) : 433-4

Decreto número 1493 retificando la convención sobre plataforma continental —3 de noviembre de 1961 (Legislative decree No. 1493: Ratification of the convention on the continental shelf—3 November 1961)

Adopted at Geneva on 29 Apr. 1958.

M  
8-03508

**Kerala. Laws, Statutes, etc. (1961)**  
*Kerala Gaz.*, (5) Pt. 1 : 247-8

Order G.O.MS. 1277/61/Agri: Rules for the subsidized supply of fishing boats, nets and other implements to fishermen co-operative societies/Fishermen who have either lost their fishing implements or those implements are completely damaged beyond any repairs while fishing in the sea due to stormy weather or due to other circumstances beyond their control—26 December 1961

The fishing implements include fishing canoes, dug-out or plank built, nets and accessories.

M

**Luxembourg. Laws, Statutes, etc. (1962)**

8-03509

*Mém. Luxemb.*, (5) : 121-2

Règlement ministériel du 23 janvier 1962 déterminant le droit spécial à l'importation de certains produits agricoles et alimentaires (Ministerial regulation determining the special import duty on certain agricultural and food products—23 January 1962)

Includes fish meals and powders.

M

**Madagascar. Laws, Statutes, etc. (1962)**

8-03510

*J. off. Répub. malgache*, (206) : 165

Additif No. 62-036 au décret No. 61-288 du 9 juin 1961 portant organisation du service de l'élevage, de la pêche maritime et des industries animales—17 janvier 1962 (Addendum No. 62-036 to decree No. 61-288 of 9 June 1961 relative to the organization of the stockbreeding, sea fisheries and animal industries service—17 January 1962)

Ad 62-01064. Amendments relating to maritime fisheries.

M

**Morocco. Laws, Statutes, etc. (1961)**

8-03511

*Bull. off. Emp. chérif.*, (2565) : 1831-2, 1855

Décision du président du conseil n° 3-199-61 du 13 décembre 1961 fixant les modalités de la péréquation du prix de la sardine destinée à la fabrication de la farine de poisson (Decision No. 3-199-61, fixing methods for the equalization of prices of sardines intended for the manufacture of fish meal—13 December 1961). *Fr Es*

M

**Norway. Laws, Statutes, etc. (1961)**

8-03512

*Norsk Lovtid.*, (23) : 669

Resolusjon om sentralisering av eksporten til de øst-europeiske markeder av annen fersk sild enn vintersild—30 juni 1961 (Royal resolution concerning the centralization of exports to the eastern European market in respect of fresh herring other than winter herring—30 June 1961). *No*

M

**Norway. Laws, Statutes, etc. (1961)**

8-03513

*Norsk Lovtid.*, (23) : 670

Resolusjon om overføring av eksporten av makrellmel fra fiskemelutvalget til sildemelutvalget—30 juni 1961 (Royal resolution transferring responsibility for mackerel-meal exports from the fish-meal commission to the herring-meal commission—30 June 1961). *No*

M

**Norway. Laws, Statutes, etc. (1961)**

8-03514

*Norsk Lovtid.*, (23) : 672

Skriv om ikrafttreden av res. om førstehåndsomsetning av fisk fra utenlandske fartøyer—30 juni 1961 (Notification concerning the entry into force of the resolution concerning the sale at first hand of fish by foreign fishing craft—30 June 1961). *No*

As of 1 Jul. 1961.



MISCELLANEOUS AND AUXILIARIES

M  
8-03515

**Norway. Laws, Statutes, etc. (1961)**  
*Norsk Lovtid.*, (26) : 744

Resolusjon om bestem. om fiske med trål i området 6–12 nautiske mil innenfor fiskerigrensen—18 august 1961 (Resolution concerning net fishing in the zones between 6 and 12 nautical miles from the Norwegian fishing waters boundary—18 August 1961). *No*

Provisions of legislation concerning net fishing to apply in that zone.

M  
8-03516

**Norway. Laws, Statutes, etc. (1961)**  
*Norsk Lovtid.*, (26) : 746

Resolusjon om adgang for danske og svenske fiskfartøyer til å drive fiske innenfor Norges fiskerigrense—18 august 1961 (Resolution authorizing Danish and Swedish fishing craft to fish in Norwegian fishing waters—18 August 1961). *No*

Exception to a general prohibition, and subject to compliance with Norwegian legislation.

M  
8-03517

**Norway. Laws, Statutes, etc. (1961)**  
*Norsk Lovtid.*, (26) : 746

Resolusjon om endring av resolusjon om ikraftsetting av lov om Norges fiskerigrense—18 august 1961 (Resolution amending the resolution concerning the entry into force of the act on the Norwegian fishing waters boundary—18 August 1961). *No*

Ad 61-12943. Minor changes in the boundary line.

M  
8-03518

**Norway. Laws, Statutes, etc. (1961)**  
*Norsk Lovtid.*, (26) : 747–8

Resolusjon ang. sjømannslovens anvendelse på fiske- og fangstfartøyer—18 august 1961 (Resolution in application of the act concerning sea-going personnel aboard fishing and whaling craft—18 August 1961). *No*

Medical expenses, etc., of such persons covered at state expense.

M  
8-03519

**Norway. Laws, Statutes, etc. (1961)**  
*Norsk Lovtid.*, (31) : 816–7

Resolusjon om endr. av reglement for fangst av bardehval og spermhval—6 oktober 1961 (Royal resolution amending regulations concerning capture of whales and sperm whales—6 October 1961). *No*

Prohibits floating processing plants on fishing boats towed thereby to process whale-meat for preservation in any navigable waters.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

## Norway. Laws, Statutes, etc. (1961)

M  
8-03520

*Norsk Lovtid.*, (32) : 847

Bestem. om endr. i forskr. for merking av hermetisk nedlagte fiskevarer m.v.—9 oktober 1961 (Order amending provisions concerning the marking of preserved fish products—9 October 1961). No

The expressions "kippered herring" and "kippered snacks" may be used only for herring approved by the preserves industry control institute.

## Norway. Laws, Statutes, etc. (1961)

M  
8-03521

*Norsk Lovtid.*, (35) : 902-11

Forskrifter for fredning av brisling og hermetisk nedlegging av brisling og småsild—13 november 1961 (Circular concerning the protection of sprats and the hermetic packaging of sprats and small herring—13 November 1961). No

Closed season on sprats from 1 Jan. to 31 May of each year. Detailed provisions governing processing of said fish. Replaces regulations of 18 Apr. 1955 on same subject.

## Peru. Laws, Statutes, etc. (1961)

M  
8-03522

*Peruano*, (6143) : 2

Resolución ministerial No. 2508 prohibiendo la pesca con aparejos de arrastre en la Bahía Independencia—4 de octubre de 1961 (Ministerial resolution No. 2508 prohibiting trawl fishing in Independencia Bay—4 October 1961)

In pursuance of general provisions prohibiting the use of dragging equipment in sea waters less than 20 fathoms deep.

## Philippines. Laws, Statutes, etc. (1961)

M  
8-03523

*Off. Gaz., Manila*, (46) : 8271-6

S. No. 541. Republic Act No. 3046: An act to define the baselines of the territorial sea of the Philippines—17 June 1961

Indicates latitude, longitude, distance, etc., of the said baselines. All waters around, between and connecting the various islands of the Philippine archipelago, irrespective of their width or dimension, are considered inland or internal waters of the Philippines.

## Philippines. Laws, Statutes, etc. (1961)

M  
8-03524

*Off. Gaz., Manila*, (46) : 8277

H. No. 766. Republic act No. 3048: An act prohibiting the operation of trawls in fishing areas seven fathoms deep or less—17 June 1961

# MISCELLANEOUS AND AUXILIARIES

**Philippines. Laws, Statutes, etc.** (1961) M  
8-03525  
*Off. Gaz., Manila*, (45) : 8083-4

Executive order No. 449 creating the president's committee on assistance to the fishing industry—14 October 1961

To promote the interest and the economic and social uplift of the small Filipino fishermen.

**Anon.** (1962) M  
8-03526  
*J. Fish. Res. Bd Can.*, 19 (3) : 513-4  
Alexander Henry Leim 1897-1960

Obituary.

**South Africa. Republic of. Laws, Statutes, etc.** (1961) M  
8-03527  
*Govt Gaz. S. Afr.*, (138) : 5

Proclamation No. 169, 1961, made under the sea fisheries act, 1940 (Act No. 10 of 1940)—5 December 1961. *En Af*

Prohibits the capture or disturbing of rock lobster, *Jasus lalandii*, from 1 Sep. to 31 Oct. of each year.

**Anon.** (1962) MF  
8-03528  
*Copeia*, (2) : 484-5  
Editorial notes and news—Translations

Announcements of formation of bibliographic file of translations into English of literature on aquatic animals, fisheries, and marine biology, at US Bureau of Commercial Fisheries, Seattle.

**The Council for Nature, London** (1962) MF  
8-03529  
Mimeo, 17 p.

A list of 16 mm. films on natural history subjects—Part 2 : Africa, Asia, Australasia, America and Antarctica

Co 62-06824. List of distributors, and of films under general subject headings.

**Ratcliffe, H. L.** (1962) MF  
8-03530  
*Science*, 137 (3529) : 550-2

Comparative pathology: an opportunity for biologists?

Reports a conference of staff of US and some other faculties of medicine and veterinary science and US National Institute of Health. Incl. reference to iodine deficiency in hatchery fish, endocrine control of Pacific salmon maturation ; observational records and facilities of Penrose Research Laboratory of the Zoological Society of Philadelphia.

**New South Wales. Laws, Statutes, etc. (1962)**MF  
8-03531*Govt Gaz. N.S.W.*, (2) : 3

Proclamation made under the fisheries and oyster farms act, 1935-1960, relating to portion of waters of Hastings River, County of Macquarie—13 December 1961

Prohibits the taking of fish by nets of every description in the specified tidal and inland waters from 1 Feb. 1962 to 31 Jan. 1967.

**New South Wales. Laws, Statutes, etc. (1961)**MF  
8-03532*Govt Gaz. N.S.W.*, (2) : 4

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Clarence River, County of Clarence—13 December, 1961

Prohibits the taking of fish and prawns by trawl nets of every description, in the specified tidal waters, from 1 Feb. 1962 to 31 Jan. 1967.

**New South Wales. Laws, Statutes, etc. (1962)**MF  
8-03533*Govt Gaz. N.S.W.*, (14) : 361

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the tidal waters of Cudgara, Mooball and Cudgen Creeks, County of Rous—24 January 1962

Rescinds the proclamations of 22 May 1957, 3 Sep. 1958 and 17 Sep. 1958. Prohibits, in the specified waters, the taking of fish by (a) nets of every description, (b) spears, spear-guns and similar devices, from 2 Feb. 1962 to 1 Feb. 1967.

**Canada. Laws, Statutes, etc. (1961)**MF  
8-03534*Can. Gaz. (II)*, (23) : 1729-35

SOR/61-513. Order in council P.C. 1961-1678 relative to the Yukon territory fishery regulations made under the fisheries act—23 November 1961

The previous regulations of 31 Mar. 1954, as amended, are revoked. The new regulations deal with licences, domestic use fishery, commercial fishery, fishery closures, prohibitions, etc.

**Canada. Laws, Statutes, etc. (1961)**MF  
8-03535*Can. Gaz. (II)*, (23) : 1806-12

DORS/61-513. Décret C.P. 1961-1678: Règlement de pêche du territoire du Yukon, selon la loi sur les pêcheries—23 novembre 1961 (SOR/61-513. Order in council P.C. 1961-1678 relative to the Yukon territory fishery regulations made under the fisheries act—23 November 1961)

*Fr* 8-03534.



# MISCELLANEOUS AND AUXILIARIES

- Ceylon. Laws, Statutes, etc.** (1962) MF  
*Ceylon Govt Gaz.*, (12,885) Pt. 1, Sect. 1: 212 8-03536  
 L.D.-B.20/41. Regulation amending the Galle fishing regulations, 1955, as amended, made under the fisheries ordinance—17 January 1962

Various amendments in respect of definition of fishing craft.

- Ceylon. Laws, Statutes, etc.** (1962) MF  
*Ceylon Govt Gaz.*, (12,895) Pt. 1, Sect. 1: 269-70 8-03537  
 Food price order No. C 340, made under the control of prices act No. 23 of 1950, relating to dried fish and dried prawns—3 February 1962

Revokes food price order No. C 315, of 23 Jun. 1961, and fixes maximum wholesale and retail prices.

- Chile. Laws, Statutes, etc.** (1960) MF  
*Diario ofic.*, *Santiago*, (24,900) : 532-6 8-03538  
 Decreto número 937 aprobando el reglamento orgánico para la dirección de agricultura y pesca—22 de diciembre de 1960 (Decree No. 937, regulating the organization and responsibilities of the Directorate of Agriculture and Fisheries—22 December 1960)

Lays down in detail the functions of the Fisheries and Game Department.

- Denmark. Laws, Statutes, etc.** (1961) MF  
*Lovtidende A*, (29) : 967 8-03539  
 Bekendtgørelse Nr. 381 om indførsel af varer m.v.—21 december 1961 (Notice No. 381 concerning the importation of certain goods—21 December 1961). *Da*

Including, *inter alia*, certain fisheries products.

- Denmark. Laws, Statutes, etc.** (1962) MF  
*Lovtidende A*, (1) : 21-30 8-03540  
 Bekendtgørelse Nr. 6 om fremstilling af hel- og halvkonserves af fisk—10 januar 1962 (Notice No. 6, concerning the production of preserves and semi-preserves of fish—10 January 1962). *Da*

Detailed provisions covering a wide variety of fish products.

- Ecuador. Laws, Statutes, etc.** (1960) MF  
*Reg. ofic. Ecuador*, (105) : 570-4 8-03541  
 Decreto legislativo No. 582-a creando el instituto nacional de la pesca—5 de diciembre de 1960 (Executive decree No. 582-a establishing the national fisheries institute—5 December 1960)

Fixes its composition and prescribes its functions. Includes by reference the plan of operations signed on 2 Jun. 1960 by the government of Ecuador, the Special Fund of the United Nations and FAO.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

MF

## France, Laws, Statutes, etc. (1961)

8-03542

*J. off. Répub. franç.*, (274) : 10716

Loi No. 61-1243 du 21 novembre 1961 tendant à interdire la vente des salmonidés sauvages (Act No. 61-1243, prohibiting the sale of wild Salmonidae—21 November 1961)

Adds a new art. 439-2 to the rural code. Exceptions granted under stated conditions.

MF

## France. Laws, Statutes, etc. (1961)

8-03543

*J. off. Répub. franç.*, (307) : 12418-93

Décret No. 61-1517 du 30 décembre 1961 modifiant les tarifs des droits de douane d'importation (Decree No. 61-1517, amending the import duty tariff—30 December 1961)

Major revision of the tariff, covering also fish and fish products.

MF

## Guadeloupe. Laws, Statutes, etc. (1962)

8-03544

*Rec. Actes adm. Guadeloupe*, (8) : 104-7

Arrêté No. 62-172 du 24 janvier 1962, portant réglementation des prix des poissons et crustacés dans le département de la Guadeloupe (Order No. 62-172 regulating the price of fish and crustaceans in the Guadeloupe department—24 January 1962)

In respect of retail sale.

MF

## India. Laws, Statutes, etc. (1962)

8-03545

*Gaz. India*, (2) Pt. 1, Sect. 1 : 3

Public notice No. 2-ITC (PN)/62 relative to movement of goods from and to Goa, Daman and Diu—1 January 1962

Restrictions on the movement of various products, including fish, fresh, salted or dried, and fish manioc from these territories to the rest of India have been lifted.

MF

## Kerala. Laws, Statutes, etc. (1962)

8-03546

*Kerala Gaz.*, (6) Pt. 1 : 311

Notification No. 90730/61/B1/H and LD, relating to exemptions under rule 10 of the Kerala prevention of food adulteration rules 1957—1 January 1962

Exempts certain products, including fish, from the operation of the said rule.

MF

## Kerala. Laws, Statutes, etc. (1962)

8-03547

*Kerala Gaz.*, (6) Pt. 6 : 320-1

Order G.O.MS. 85/62/Agri. prescribing rules for the grant of subsidy for freezing factories—18 January 1962

Subsidy to private parties for establishing freezing factories, for fish and fish products only.

# MISCELLANEOUS AND AUXILIARIES

## Mexico. Laws, Statutes, etc. (1961)

MF  
8-03548

*Diario ofic., Méx.*, (39) : 2-3

Decreto por el que se crea, con carácter permanente, la comisión nacional consultativa de pesca—8 de diciembre de 1961 (Decree creating, on a permanent basis, the national advisory commission on fisheries—8 December 1961)

To advise the industry and trade ministry on matters relating to fisheries.

## Morocco. Laws, Statutes, etc. (1961)

MF  
8-03549

*Bull. off. Emp. chérif.*, (2566 bis) : 1895-903, 1919-28

Dahir n° 1-61-444 du 30 décembre 1961 substituant une taxe sur les produits et une taxe sur les services à la taxe sur les transactions (Dahir No. 1-61-444, substituting a production tax and a service tax for the transactions tax—30 December 1961). *Fr Es*

Section 11 provides for exemptions for certain products including fish.

## Netherlands. Laws, Statutes, etc. (1961)

MF  
8-03550

*Staatsblad, Den Haag*, (428-432) : 955-6

Besluit 432 van 12 december 1961, houdende wijziging VI van het in- en uitvoerbesluit landbouwprodukten 1958 (Decree amending the decree of 1958 concerning the import and export of agricultural products—12 December 1961). *Ne*

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8-04056  
*Boll. Soc. adriatic. Sci. nat.*, 50 : 1-10

Analisi chimica e spettrografica preliminare di un campione di fondo dell'Adriatico centrale (Preliminary results of the chemical and spectrographical analysis of a sea-bottom sample of the central Adriatic Sea). *It*

Sample collected at about 218 m depth in the centre of the Adriatic Sea pit using a Kullenberg-type piston core. Issued also as: *Pubbl. Ist. talassogr. Trieste*, (358).

**Chierago Meng, N. & M. Picotti** (1960)

M  
8-04057

*Arch. Oceanogr. Limnol., Venezia*, 11 (3) : 421-4

Crociera talassografica adriatica 1955-4. La distribuzione del rame nelle acque dell'Adriatico (Adriatic talassographic cruise 1955-4. The copper distribution in the waters of the Adriatic Sea). *It En*

Uniform concentration but for the Adriatic pit where an exceptionally low concentration was found. Issued also as: *Pubbl. Ist. talassogr. Trieste*, (362).

**Ferraro, S.** (1960)

M  
8-04058

*Pubbl. Ist. talassogr. Trieste*, (367) : 19 p.

Tabelle di previsione delle maree per Trieste e per l'Adriatico settentrionale per l'anno 1961 (Tide prediction tables for Trieste and the northern Adriatic Sea for the year 1961). *It*

**Boffi, V. & A. Boffi-Lucarelli** (1962)

M  
8-04059

*Boll. Soc. ital. Biol. sper.*, 37 (24 bis) : 1821-3

Prime ricerche sulla sostanza organica dissolta nel mare per lo studio della contaminazione radioattiva (First researches on the organic substances dissolved in the sea for the study of radioactive pollution). *It*

Qualitative and quantitative determinations of the carbohydrates in seawater and their metabolism.

**Polli, S.** (1961)

M  
8-04060

*Pubbl. Ist. talassogr. Trieste*, (382) : 20 p.

Tabelle di previsione delle maree per Trieste e l'Adriatico settentrionale per l'anno 1962 (Tide prediction tables for Trieste and the northern Adriatic Sea for the year 1962). *It*

**Polli, S.** (1961)

M  
8-04061

*Pubbl. Ist. talassogr. Trieste*, (385) : 7 p.

La propagazione della marea nel golfo di Venezia (Tide propagation in the gulf of Venice). *It*

Importance of the seiches in the propagation of the tide in abnormal meteorological conditions.

**Vatova, A.** (1960)

M  
8-04062

*Nova Thalassia*, 2 (9) : 1-59

Condizioni idrografiche e fasi di marea nell'alta laguna veneta (Hydrographic conditions and tidal phases in the high Venetian Lagoon). *It Fr En De*

Tables with physico-chemical data and relations between hydrographic conditions and tidal phases.

- Faganelli, A.** (1962) M  
8-04063  
*Boll. Pesca. Piscic. Idrobiol.*, 15 (2) : 152-70

La metodica per la determinazione dei sali nutritivi adottata durante le crociere dell'Anno Geofisico Internazionale (Methods used for the determination of nutrient salts during the I.G.Y. cruises in the Mediterranean Sea). It Fr En

- Estoques, M. A.** (1962) MG  
8-04064  
*J. Atmos. Sci.*, 19 (3) : 244-50

The sea breeze as a function of the prevailing synoptic situation

Presents a mathematical model of sea breeze circulation. Issued also as: *Contr. Hawaii Inst. Geophys.* (31).

- Carozzi, A. V.** (1962) MF  
8-04065  
*J. sediment. Petrol.*, 32 (1) : 148-9

Der Porenraum der Sedimente (The pore space in sediments)

Re 8-04026. Discussion of theoretical aspects of porosity and its determination; diffusion, permeability, and flow in pore space; and the contents of pore space (saline solutions, oil and natural gas) with extensive recent bibliography.

- Grim, R. E. & F. C. Loughnan** (1962) MF  
8-04066  
*J. sediment. Petrol.*, 32 (2) : 240-8

Clay minerals in sediments from Sydney Harbour, Australia

Discussion of these estuarine sediments and chemical changes induced by sea water.

- Wulf, G. R.** (1962) MF  
8-04067  
*J. sediment. Petrol.*, 32 (2) : 327-9

Eroded oscillation ripple marks in cretaceous Newcastle sandstone, Wyoming and South Dakota

Relates asymmetric and flat-topped ripple marks to tidal action just prior to burial.

- Butzer, K. W. & J. Cuerda** (1962) MF  
8-04068  
*J. Geol.*, 70 (4) : 398-416

Coastal stratigraphy of southern Mallorca and its implications for the pleistocene chronology of the Mediterranean Sea

Detailed geomorphologic, stratigraphic and palaeontologic investigations on the southern littorals of this central Mediterranean island related to glaciostatic regression intervals of the Pleistocene.

**Magarvey, R. H. & J. W. Geldart** (1962)

MF  
8-04069

*J. atmos. Sci.*, 19 (1) : 107-13

Drop collisions under conditions of free fall

The results of photographic observations on forced collisions between water droplets is related to the possible importance of collisions upon drop size distribution of natural rain.

**O'Brien, V.** (1961)

MF  
8-04070

*J. Met.*, 18 : 549-52

Why raindrops break up: vortex instability

**Blanchard, D. C.** (1962)

MF  
8-04071

*J. atmos. Sci.*, 19 (1) : 119-20

Comments on the break-up of raindrops

Re 8-04070. Critical comment on a recent explanation for the break-up of raindrops.

**O'Brien, V.** (1962)

MF  
8-04072

*J. atmos. Sci.*, 19 (1) : 120.

Reply

Re 8-04071.

**Petit, G. & R. Mizoule** (1962)

MF  
8-04073

*Vie et Milieu*, 13 (2) : 205-30

Contribution a l'étude écologique du complexe lagunaire Bages-Sigean (Aude) (Contribution to the ecological study of the lagoon complex Bages-Sigean (Aude) )

Topography, hydrography, meteorology, hydrology, sedimentology.

**Siever, R.** (1962)

MF  
8-04074

*J. Geol.*, 70 (2) : 127-50

Silica solubility, 0°-200°C, and the diagenesis of siliceous sediments

Explains diagenetic changes in silica content of sediments and reviews data on solubility of amorphous silica and quartz.

**Maher, S. W.** (1962)

F  
8-04075

*J. sediment. Petrol.*, 32 (1) : 138-9

Primary structures produced by tadpoles

Observations on polygonal interference ripple marks produced in silty sediment by the thrashing actions of tadpoles.



F

8-04076

**Loughnan, F. C.** (1962)

*J. sediment. Petrol.*, 32 (2) : 284-90

Some considerations in the weathering of the silicate minerals

The weathering of silicate minerals is a function of the parent mineral structure and mobility of the essential cations. In the normal pH range of 4 to 10 the amount of water leeching through the mineral is the major factor influencing cation mobility, although the redox potential markedly influences the solubility of iron.

F

8-04077

**Carson, C. E. & K. M. Hussey** (1962)

*J. Geol.*, 70 (4) : 417-39

The oriented lakes of Arctic Alaska

Extensive theoretical consideration of the processes producing the marked alignment of elongate lakes of the Alaskan Arctic coastal plain.

F

8-04078

**Sourie, R.** (1962)

*Vie et Milieu*, 13 (2) : 333-40

L'évolution du système acide carbonique-bicarbonate-carbonate de calcium et l'amélioration de certaines eaux de pisciculture (Evolution of the system carbonic acid-bicarbonate-carbonate of calcium and the improvement of certain fishculture waters)

F

8-04079

**Antevs, E.** (1962)

*J. Geol.*, 70 (2) : 194-205

Transatlantic climatic agreement versus C<sup>14</sup> dates

Examines the hypothesis that the main, late, glacial ice ages occurred at about the same times in Europe and North America.

F

8-04080

**Figura, V.** (1962)

*Boll. Pesca Piscic. Idrobiol.*, 15 (2) : 237-45

Osservazioni sulle correnti del lago Sabatino o di Bracciano (Observations on the currents in lake Sabatino or Bracciano). *It Fr En*

Existence of a deep current and of a 'little current' in the mud-water and on its surface; decreases near the shore. Studies on the factors which may cause these currents.

F

8-04081

**Gianotti, F. S.** (1959)

*Boll. Zool.*, 26 : 590-600

Apporti di carico biologico attraverso la nuova adduzione di acque al lago Trasimeno (Biological charges carried out in the Trasimenus Lake through the new artificial tributary). *It En*

Deductions as to the possible future of the amount of animal and vegetal quota in the biological charge in the lotic-lentic type water system constituted by the lake and Angiullara canal, after the hydraulic works are finished.

**Di Giovanni, M. V.** (1959)

F

*Boll. Zool.*, 26 : 615-36

8-04082

Esponenti endofitici, epifitici e fitosaprobi del lago Trasimeno: facies autunnale (Hydrophytic colonies in lake Trasimeno: autumnal facies). *It*

Calls attention to the increasing and undoubted stagnation of the lake within the last few decades.

**Bramer, H. C. & M. J. Walsh** (1962)

FG

*ISA J.*, 9 (9) : 96-7

8-04083

Temperature compensation for oxygen measuring

Applications of methods in monitoring effluents and surface streams for pollution control purposes.

**Bull, W. B.** (1962)

FG

*J. sediment. Petrol.*, 32 (2) : 211-6

8-04084

Relation of textural (CM) patterns to depositional environment of alluvial-fan deposits

Logarithmic plots of the coarsest 1-percentile grain size (C) and the median grain size (M) of alluvial-fan deposits make distinctive patterns for samples from central California.

**Nayudu, Y. R.** (1962)

G

*J. sediment. Petrol.*, 32 (2) : 326-7

8-04085

Rapid method for studying silt-size sediments and heavy minerals by liquid immersion

Issued also as: *Contr. Univ. Wash. Dep. Oceanogr.* (272).

**Siever, R.** (1962)

G

*J. sediment. Petrol.*, 32 (2) : 329-31

8-04086

A squeezer for extracting interstitial water from modern sediments

Detailed description and illustration of a manually operated and a gas operated filter press.

**Friedman, G. M.** (1961)

G

*J. sediment. Petrol.*, 31 (4) : 514-29

8-04087

Distinction between dune, beach and river sands from their textural characteristics

Four textural characteristics of sediments which can be expressed as statistical parameters were studied: first moment (mean), third moment (skewness), fourth moment (kurtosis), and standard deviation. 267 assorted sediment samples indicated that these parameters can characterize specific types of environments. Variations in parameters are due to modes of transport and "competency" of the medium of transport.

## PLANKTON

G

8-04088

**Porter, J. J.** (1962)

*J. sediment. Petrol.*, 32 (1) : 124-35

Electron microscopy of sand surface texture

Electron photomicrographs of sand grains are used to indicate processes which affected them. The method is discussed and a classification of surface textures suggested. The five classes are abraded (chipped or ground), lobate (cobbed appearing), corroded (solution pitted), smooth, and faceted (associated with crystallinity). Textural groups and grain size seem related.

G

8-04089

**McCammon, R. B.** (1962)

*J. Geol.*, 70 (4) : 453-65

Efficiencies of percentile measures for describing the mean size and sorting of sedimentary particles

G

8-04090

**Robinson, S. M.** (1962)

*J. atmos. Sci.*, 19 (2) : 189-90

Computing wind profile parameters

Presents a numerical method for determining the three wind profile parameters: roughness length, zero point displacement, and surface stress. A FORTRAN language program for these calculations is available as a part of *Tech. Note Dep. Met. Univ. Wis.* (1).

G

8-04091

**Kuo, H. L.** (1962)

*J. atmos. Sci.*, 19 (3) : 236-43

On the controlling influences of eddy diffusion on thermal convection

Time dependent solutions of the non-linear equations of thermal convection are obtained, including the effects of non-linear diffusion processes which have a controlling influence on thermal convection.

G

8-04092

**Dumait, P.** (1962)

*C.R. Acad. Sci., Paris*, 255 (14) : 1637-9

Le vibroséparateur et son emploi dans la concentration des pollens contenus dans les sédiments (The vibroseparator and its utilization for the concentration of pollen contained in sediments)

Brief note describing the method and equipment used.

## PLANKTON

M

8-04093

**Buljan, M.** (1961)

*Proc. Gen. Fish. Coun. Medit.*, 6 : 237-43

Some results of fertilization experiments carried out in Yugoslav marine bays. Fr

CR 61-00439.

- Vučetić, T.** (1961) M  
8-04094  
*Proc. gen. Fish. Coun. Medit.*, 6 : 245-9  
 Abundance of zooplankton compared with sardine catch in the central part of the eastern Adriatic. Fr

CR 61-00440.

- Grindley, J. R. & F. J. R. Taylor** (1962) M  
8-04095  
*Nature, Lond.*, 195 (4848) : 1324  
 Red water and mass-mortality of fish near Cape Town

High concentration of dinoflagellate *Gonyaulax polygramma* Stein, associated with another, *Prorocentrum micans* Ehrb., appeared in False Bay during March and early April 1962, resulting in mass-mortality of fish and marine invertebrates, when the dinoflagellates died in large numbers. Prof. N. Sapeika, Department of Pharmacology, University of Cape Town, carried out toxicity tests on fish, limpets, *Patella longicosta*, and black mussels, *Mytilus perna*, collected from affected area.

- Tokin, B. P.** (1961) M  
8-04096  
*Dokl. Akad. Nauk SSSR*, 141 (1) : 252-5  
 (Regenerative ability of ctenophores). Ru

Describes results of experiments in 1959-60 on two Barents Sea spp. of *Bolinopsis* and *Beroë*.

- Tokin, B. P.** (1962) M  
8-04097  
*Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1004-6  
 Regenerative ability of ctenophores

En 8-04096.

- Mileikovskii, S. A.** (1962) M  
8-04098  
*Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1109-12

Assignment of two *Rostraria*-type polychaete larvae from the plankton of the Northwest Atlantic to species *Amphinome pallasii* Quatrefages 1865 and *Chloenea atlantica* McIntosh 1885 (Polychaeta, Errantia, Amphinomorpha)

En 62-03618.

- Horridge, G. A., D. M. Chapman & B. MacKay** (1962) M  
8-04099  
*Nature, Lond.*, 193 : 899

Naked axons and symmetrical synapses in an elementary nervous system

IABS 26 (3) 6644. E.M. study of the neurones of *Aurelia* and *Cyanea*.



# PLANKTON

- Bucalossi, G.** (1960) M  
8-04100  
*Bull. Inst. océanogr. Monaco*, (1189) : 40 p.

Étude quantitative des variations du phytoplancton de la baie d'Alger en fonction du milieu—novembre 1959 à mai 1960 (Quantitative study of the variations of phytoplankton in the bay of Algiers in relation to the environment—November 1959 to May 1960)

- Lacroix, G.** (1961) M  
8-04101  
*Cah. Inform. Sta. Biol. Mar. Grande-Rivière*, (8) : 131 p

Catalogue des échantillons de zooplancton du musée de la station de biologie marine de Grande-Rivière, 1951–1961 (Catalogue of samples of zooplankton of the museum of the marine biological station of Grande-Rivière, 1951–1961)

- von Koenigswald, G. H. R. et al.** (n.d. 1962) M  
8-04102  
New York, Elsevier Publ. Co., 450 p.  
Evolutionary trends in Foraminifera

Collection of papers dedicated to I. M. van der Vlerk on occasion of his 70th Birthday. Contributors: T. Barnard (Great Britain), F. Brotzen (Sweden), Maria B. Cità-Sironi (Italy), C. W. Drooger (The Netherlands), C. O. Dunbar (U.S.A.), M. S. Glaessner (Australia), H. Hiltermann (Germany), L. Hottinger (Morocco), R. Lagaay (The Netherlands), H. J. MacGillavry (The Netherlands), A. Papp (Austria), P. Rat (France), D. M. Rauzer-Chernousova (U.S.S.R.), H. Schaub (Switzerland), A. H. Smout (Great Britain).

- Vatova, A.** (1962) M  
8-04103  
*Ric. sci., (II B)*, 2 (1) : 44–51

Rapporti tra concentrazione di sali nutritivi e produttività delle acque lagunari (Relation between nutrient salt concentration and organic productivity in lagoon waters). *It Fr En De*

In the lagoons of Venice primary productivity during 1959–1960 was determined following the <sup>14</sup>C method of Steemann Nielsen, suitably modified for this purpose. Tables with results.

- Crisafi, P.** (1959) M  
8-04104  
*Boll. Zool.*, 26 : 41–7

Sulla *Oithona spinirostris* Claus (Copepoda, Cyclopoida) dello stretto di Messina (On *Oithona spinirostris* (Copepoda, Cyclopoida) of the strait of Messina). *It En*

Demonstrates that the male ascribed to this sp. belongs to another one.

**Crisafi, P. (1959)**

M

*Boll. Zool.*, 26 : 49-57

8-04105

Sulla *Oithona helgolandica* Claus (Copepoda Cyclopoida) dello stretto di Messina (On *Oithona helgolandica* Claus (Copepoda, Cyclopoida of the straits of Messina). *It En*

Concludes that *Oithona similis* must be considered as synonym of *O. helgolandica* and that the specimen hitherto described as male of *O. helgolandica* belongs to another sp.

**Crisafi, P. (1959)**

M

*Boll. Zool.*, 26 : 69-74

8-04106

Sul presunto dimorfismo sessuale del genere *Oithona* (Copepoda, Cyclopoida) e sulla sua posizione sistematica (On the presumed sexual dimorphism in the genus *Oithona* (Copepoda, Cyclopoida) and on its systematic position). *It En*

Calls attention to the lack of a true sexual dimorphism and herewith to the different systematical position.

**De Cesaris Coromaldi, L. & E. Urbani (1959)**

M

*Boll. Zool.*, 26 : 243-8

8-04107

Attività enzimatiche in *Artemia salina* Leach diploide e tetraploide (Enzymatic activities in diploid and tetraploid *Artemia salina* Leach). *It De*

Demonstrates that some enzymes are influenced by the polyploid condition, while others show the same activity in the two biotypes.

**Ghirardelli, E. (1959)**

M

*Boll. Zool.*, 26 : 413-21

8-04108

Osservazioni sulla corona ciliata nei chaetognati (Observations of the ciliate crown in chaetognaths). *It Fr*

Differences between benthonic and pelagic chaetognaths.

**Battaglia, B. & L. Maleson (1959)**

M

*Boll. Zool.*, 26 : 423-33

8-04109

Ricerche sulla determinazione del sesso nel copepode *Tisbe gracilis* (T. Scott) (Researches on the sex-determination in the copepod *Tisbe gracilis* T. Scott). *It En*

Results of the experiments of inbreeding, outbreeding, selection towards increase of males and towards increase of females.

M

8-04110

**Anichini, C.** (1959)

*Boll. Zool.*, 26 : 669-82

Risultati dei primi dodici mesi delle ricerche planetonologiche eseguite dall'istituto di zoologia di Cagliari sull'Anno Geofisico Internazionale (Results of the first twelve months of planktonic researches carried out by the zoological institute of Cagliari during I.G.Y.). *It En*

M

8-04111

**Schreiber, B., L. Cavalca & E. Bottazzi-Massera** (1959)

*Boll. zool.*, 26 : 213-20

Ecologia degli Acanthari e la circolazione dello Sr nel mare (Ecology of Acantharia and Sr circulation in the sea). *It Fr*

These protozoans are able to accumulate Sr in their bodies and their importance is discussed with regard to the problem of circulation and capture of radioactive isotopes in the sea.

MF

8-04112

**Genovese, S.** (1962)

*Atti Soc. pelor.*, 7 (3/4) : 269-271

Sul fenomeno dell'acqua rossa riscontrato nello stagno salmastro di Faro (Messina) (On the red-water phenomenon observed in the brackish pond of Faro, Messina). *It En*

Presence of a 'red-water' layer observed from April to July 1960.

F

8-04113

**Hazelwood, D. H.** (1962)

Thesis, Washington State University, 78 p.

Population dynamics of some freshwater zooplankton

DA 23 (2) : 756. Weekly samples taken during period, March 1959 to March 1961, from Kepple Lake, Washington, analyzed for number of *Daphnia schodleri*/l, *Diaptomus leptopus*/l, coefficient of effective light extinction, possible food, water temperature, dissolved oxygen, total alkalinity, and carbonate concentration. Photoperiod and linear time trends were also considered. The effects of various trace elements on population density and the effects of photoperiod and temperature upon HL/CL and TL/CL ratios of *Daphnia* were analyzed.

F

8-04114

**Songeur, M.** (1961)

*Vie et Milieu*, 12 (3) : 483-496

Un nouveau copépode psammique de Lorraine (A new interstitial copepod from Lorraine)

Describes *Parastenocaris psammica* n.sp. and its geographical distribution.

F

8-04115

**Šrámek-Hušek, R.** (1962)

*Fauna ČSSR*, 16 : 416 p.

Lupenonožci—Branchiopoda (Branchiopods). *Cs*

**Moroni, A.** (1962)F  
8-04116*Boll. Pesca Piscic. Idrobiol.*, 15 (2) : 194-224

Il lago-serbatoio dei Paduli (Passo del Lagastrello-Val d'Enza)—Ricerche geomorfologiche e biologiche (The reservoir-lake of Paduli in Val d'Enza, northern Appennines; geomorphological and biological researches). *It Fr En De*

The main characteristics are: lack of a typical littoral or sublittoral fauna, lesser productivity of single zooplanktonic organisms, notable variation of the conformation of the biological cycles of Copepoda and Cladocera.

**Merlo, S.** (1959)F  
8-04117*Boll. Zool.*, 26 : 383-96

Distribuzione e frequenza del plancton del lago di Garda (Distribution and frequency of plankton in the Garda Lake). *It En*

Monthly distribution from Feb. 1957 through Jan. 1958 and monthly frequencies of the main groups of zoo- and phytoplankton.

## BENTHOS

**Elroi, D. & B. Komarovsky** (1961)M  
8-04118*Proc. gen. Fish. Coun. Medit.*, 6 : 261-7

On the possible use of the fouling ascidian *Ciona intestinalis* as a source of vanadium, cellulose and other products. *Fr*

CR 61-00443.

**Ghirardelli, E.** (1961)M  
8-04119*Proc. gen. Fish. Coun. Medit.*, 6 : 279-82

La pêche des mollusques céphalopodes et leur importance biologique et économique (Fishing of cephalopod molluscs and their biological and economic importance). *En*

CR 61-00466.

**Komarovsky, B. & T. Edelstein** (1961)M  
8-04120*Proc. gen. Fish. Coun. Medit.*, 6 : 285-7

Preliminary survey of the microflora and microfauna occurring on experimental anti-fouling panels in the Kishon Harbour. *Fr*

CR 61-00448.



**Blake, J. W.** (1962) M  
8-04121  
Thesis, Univ. of North Carolina, 62 p.

Preliminary characterization of oyster metabolites attractive to the predatory gastropod *Urosalpinx cinerea*

DA 23 (2) : 755. Metabolites of *Crassostrea virginica*, studied to characterize fraction which serves as an attractant for *Urosalpinx*. Biological assay to determine relative attractiveness of experimental solutions, carried out in spiral flow bioassay apparatus constructed so as to take advantage of the natural geo-, rheo-, and phototactic responses of the snails to facilitate their chemotactic orientation.

**Mayes, P. A.** (1962) M  
8-04122  
*Nature, Lond.*, 195 (4848) : 1269-70

Comparative investigations of the euryhaline character of *Littorina* and the possible relationship to intertidal zonation

Experiments with British spp. involving immersion in water of different salinities.

**Ivanov, A. I.** (1962) M  
8-04123  
*Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1044-5

Some data on the quantitative distribution and diminution in size of *Rapana bezoar* L. in eastern part of Black Sea and Kerch Strait

En 62-03661. First discovered in Black Sea in 1947 in region of Novorossiisk. Mollusk accidentally introduced from Pacific Ocean, where it is common off the shores of Japan, China, and the USSR. Is a carnivore, feeds on lamelibranchiate mollusks, and thus inflicts considerable damage on oyster and mussel banks. Investigation of stock and distribution of commercial mollusks in 1960 collected material, from 266 stations.

**Ivanov, A. I.** (1961)\* M  
8-04124  
*Dokl. Akad. Nauk SSSR*, 141 (4) : 991-3

(The extension of the distribution of *Rapana bezoar* L. and its penetration into the north-western part of the Black Sea). Ru

Ci 62-03661.

**Ivanov, A. I.** (1962) M  
8-04125  
*Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1113-4

The extension of the distribution of *Rapana bezoar* L. and its penetration into the north-western part of the Black Sea

En 8-04124. Ci 8-04123.

**Mamkaev, Iu. V.** (1961)

M  
8-04126

*Dokl. Akad. Nauk SSSR*, 141 (6) : 1501-4

(A new representative of the gnathostomulids *Gnathostomula murmanica* sp. n.). *Ru*

In 1956 Ax described peculiar group of animals inhabiting marine sands and provisionally related to the turbellarians. Two genera and three spp. are known from sand in Kiel Bay, the North Sea, the Mediterranean Sea and the Indian Ocean. In July 1960, gnathostomulids were encountered on the coastal regions of Dal'nexelenets Bay in the Barents Sea (Eastern Murmansk, Dal'nee Zelentsy).

**Mamkaev, Yu. V.** (1962)

M  
8-04127

*Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1115-7

A new representative of the gnathostomulids *Gnathostomula murmanica* sp. n.

*En* 8-04126.

**Moody, M. F.** (1962)

M  
8-04128

*J. exp. Biol.*, 39 : 21-30

Evidence for the intraocular discriminations of vertically and horizontally polarised light by octopus

IABS 26 (2) 4095.

**Lyutova, M. I. & N. L. Fel'dman** (1960)

M  
8-04129

*Tsitologiya*, 2 : 699-708

(Study of the adaptability of some marine algae to variations in temperature). *Ru*

IABS 26 (2) 4263. Methods of vital staining in *Fucus inflatus*, *Enteromorpha compressa* and *Porphyra* sp. showed that the organisms, after being kept at different temperatures for several hours had various ranges of thermostability.

**Zaks, M. G. & M. M. Sokolova** (1960)

M  
8-04130

*Tsitologiya*, 2 : 448-53

(Role of potassium in adaptation of lug-worm tissues to hypotonic media). *Ru*

IABS 26 (2) 4293. Demonstrates that whole worm *Arenicola marina* is more highly resistant to harmful effects of hypotonic solution than its isolated tissues.

**Young, J. Z.** (1962)

M  
8-04131

*Phil. Trans. (B)*, 245 : 1-58

The retina of cephalopods and its degeneration after optic nerve section

IABS 26 (2) 4298.

- Chassard, C.** (1961) M  
8-04132  
*C.R. Acad. Sci., Paris*, 253 : 3076-7  
 (Chromatic effects of ablation of the ocular stalks in the decapod crustacean *Hippolyte varians* Leach). *Fr*

IABS 26 (2) 4299.

- Drach, P. & M. Gabe** (1962) M  
8-04133  
*C.R. Acad. Sci., Paris*, 254 : 165-7  
 (Cyclic evolution of neurosecretion in the X organs of caridids—crustacea—during the intermoult). *Fr*

IABS 26 (2) 4300.

- Shirmunskiy, A. V.** (1960) M  
8-04134  
*Tsitologiya*, 2 : 675-89  
 (Study of temperature adaptations in invertebrates from South China Sea). *Ru*

IABS 26 (2) 4307.

- Wainwright, B. A.** (1962) M  
8-04135  
*Experientia*, 18 : 18-9  
 An anthozoan chitin

IABS 26 (2) 4310. Major constituent of skeleton of the Hawaiian reef coral, *Pocillopora damicornis* L., is chitin.

- Howie, D. I. D.** (1961) M  
8-04136  
*Nature, Lond.*, 192 : 1100-1  
 Spawning mechanism in the male lug-worm

IABS 26 (2) 4314. Emission of gametes in *Arenicola marina* involves primarily a change associated with their maturation so that they can be accepted by the ciliated funnels of the nephromixia.

- Alfimov, N. N. & A. I. Proshkina-Lavrenko** (1961) M  
8-04137  
*Dokl. Akad. Nauk SSSR*, 136 : 230-2  
 (Biology and biochemistry of *Cladophora siwaschensis* Meyer). *Ru*

IABS 26 (2) 4262. Keeping *Cladophora* in sea water of various concentrations affected its morphology, mineral salt and vitamin content.

- M  
8-04138
- Allen, J. R. L. & J. W. Wells** (1962)  
*J. Geol.*, 70 (4) : 381-97  
 Holocene coral banks and subsidence in the Niger delta
- Extensive series of echograms of the Nigerian continental shelf. Distribution of buried and exposed dead coral assemblages related to downwarping and sea level changes at the time of their development. The coral banks, dominated by *Madracis asperula* and *Dendrophyllia ramea*, were dated from 2,920 ± 100 years B.P. to 3,885 ± 125 years B.P. by radiocarbon dating. Several coral species are illustrated, including a possible new species of *Dendrophyllia*.
- M  
8-04139
- von Stosch, H. A.** (1962)  
*Naturwissenschaften*, 49 : 42-3  
 (I requirements of marine algae). *De*
- IABS 26 (3) 6580. I. arsenite and cobalamin requirements of *Asparagopsis armata* studied using a Schreiber solution for culture. Effects of I. arsenite and cobalamin deficiency and replacement are reported.
- M  
8-04140
- Blinks, L. R. & C. V. Givan** (1961)  
*Biol. Bull., Woods Hole*, 121 : 230-3  
 The absence of daily photosynthetic rhythm in some littoral marine algae
- IABS 26 (3) 6585.
- M  
8-04141
- Bouck, G. B.** (1962)  
*J. cell Biol.*, 12 : 553-69  
 Chromatophore development, pits, and other fine structure in the red alga, *Lomentaria baileyana* (Harv.) Farlow
- IABS 26 (3) 6614. Ci 62-01904.
- M  
8-04142
- Zonana, H. V.** (1961)  
*Johns Hopk. Hosp. Bull.*, (109) : 185-205  
 Fine structure of squid retina
- IABS 26 (3) 6625.
- M  
8-04143
- Braverman, M. H.** (1962)  
*Science*, 135 : 310-1  
*Podocoryne carnea*, a reliable differentiating system

IABS 26 (3) 6634. Marine hydroid can be easily grown on microscope slides in culture and provides a simple model for the study of differentiating systems. Number of nutritive hydranths in a colony increases exponentially until sexual forms appear.



- Lallier, R.** (1962) M  
8-04144  
*Experientia*, 18 : 141-2  
 (Vegetalisation of the larva of the sea urchin *Paracentrotus lividus* by chloramphenicol). *Fr*

IABS 26 (3) 6635.

- Matthews, J. P.** (1962) M  
8-04145  
*Invest. Rep. S.W. Afr. Mar. Res. Lab.*, (7) : 61 p.  
 The rock lobster of south west Africa (*Jasus lalandii*) (Milne Edwards): size frequency, reproduction, distribution and availability

- Gorodilov, Yu. N.** (1961) M  
8-04146  
*Tsitologiya*, 3 : 469-70  
 (The thermostability of the cells of *Arenicola marina* in relation to the temperature of the habitat). *Ru*

IABS 26 (3) 6701.

- Samosudova, N. V. & M. E. Slasvskaya** (1961) M  
8-04147  
*Tsitologiya*, 3 : 196-7  
 (Ultrastructural peculiarities of adductor muscle in scallop). *Ru*

IABS 26 (1) 2247.

- Gonor, J. J.** (1961) M  
8-04148  
*Vie et Milieu*, 12 (3) : 381-403  
 Observations on the biology of *Lobiger serradifalei*, a shelled sacoglossan opisthobranch from the Mediterranean. *Fr*

Feeding, reproduction, description of the living animal.

- Reyss, D.** (1961) M  
8-04149  
*Vie et Milieu*, 12 (3) : 473-81  
*Lagisca drachi*, n. sp., polychète Aphroditidea récoltée dans le rech Lacaze-Duthiers (*Lagisca drachi*, n. sp., Polychaeta Aphroditidae, collected in the Lacaze-Duthiers canyon)

Taxonomic description and systematic position. Key to the world spp. of the genus.

- Davant, P. & B. Salvat** (1961) M  
8-04150  
*Vie et Milieu*, 12 (3) : 405-71  
 Recherches écologiques sur la macrofaune intercotidale du bassin d'Arcachon. 1. Le milieu physique (Ecological research on the intercotidal macrofauna of the Arcachon basin. 1. The physical environment)

M

8-04151

**Haefelfinger, H.-R.** (1962)*Vie et Milieu*, 13 (1) : 161-5*Crimora papillata* Alder 1862, opisthobranch nouveau pour la Méditerranée (*Crimora papillata* Alder 1862, new opisthobranch for the Mediterranean)

Description of species.

M

8-04152

**Burgi, A. & C. Devos** (1962)*Vie et Milieu*, 13 (2) : 391-2Accumulation exceptionnelle de *Creseis acicula*, au long des côtes, dans la région de Banyuls-sur-Mer (Exceptional accumulation of *Creseis acicula*, along the coast of the Banyuls-sur-Mer region)

M

8-04153

**Laubier, L.** (1962)*Vie et Milieu*, 13 (2) : 388-90*Mystides* (*Pseudomystides*) *limbata* Saint-Joseph, Phyllodocidae nouveau pour la Méditerranée (*Mystides* (*Pseudomystides*) *limbata* Saint-Joseph, new Phyllodocidae for the Mediterranean)

Record of occurrence.

M

8-04154

**Monniot, F.** (1962)*Vie et Milieu*, 13 (2) : 231-322Recherches sur les graviers à *Amphioxus* de la région de Banyuls-sur-Mer (Research on the *Amphioxus* sand of the Banyuls-sur-Mer region)

Definition of geographic area, study of sediments and fauna, comparison of the Banyuls ground with that of other areas.

M

8-04155

**Belloc, G.** (1960)*Bull. Inst. océanogr. Monaco*, (1188) : 7 p.

Catalogue des types d'isopodes du Musée océanographique de Monaco (Catalogue of types of isopods of the Oceanographic Museum of Monaco)

M

8-04156

**Vernet-Cornubert, G.** (1960)*Bull. Inst. océanogr. Monaco*, (1186) : 24 p.Influence de l'ablation des pédoncules oculaires sur la mue, la ponte et les caractères sexuels externes de *Pisa tetraodon* Pennant (Influence of oblation of the ocular peduncles on the moulting, spawning and external sexual characters of *Pisa tetraodon* Pennant)

M

8-04157

**Deschamps, P.** (1960)*Trav. Cent. Rech. Étud. océanogr.*, 3 (3) : 41-51

Note sur l'attaque des bois immergés en milieu marin (Note on the attack to immersed wood in the marine environment)

Notes on marine borers and environment and their effect on immersed wood.

- Caso, M. E.** (1961) M  
8-04158  
*An. Inst. Biol. Univ. Méx.*, 32 (1-2) : 313-31

Estudios sobre asteridos de Mexico. Observaciones sobre especies pacificas del genero *Acanthaster* y descripción de una subespecie nueva, *Acanthaster ellisii pseudoplanci* (Studies of asterids of Mexico. Observations on Pacific species of the genus *Acanthaster* and description of a new subspecies *Acanthaster ellisii pseudoplanci*)

- Rioja, E.** (1961) M  
8-04159  
*An. Inst. Biol. Univ. Méx.*, 32 (1-2) : 235-49

Estudios anelidológicos 25. Un nuevo genero de la familia Pareulepidae, del Golfo de México (Annelidologic studies 25. A new genus of the family Pareulipidae, of the Gulf of Mexico)

Description of *MEXIEULEPIS* n.g. and *Mexieulepis elongatus* n. sp.

- Tar'ib, I.** (1959) M  
8-04160  
*Berita Perik.*, 11 (4-5-6) : 108-10

Soekolilo dengan hasil terungnja (Sea-cuumber fishing in Soekolilo, near Surabaya). *Bah Ind*

Illustrated description of local minor industry.

- Bargoni, N. & A. Sisini** (1962) M  
8-04161  
*Boll. Soc. ital. Biol. sper.*, 37 (24 bis) : 1815-8

Su di una L-serinadeidraasi dell'epatopancreas di *Carcinus moenas* L. (On a L-serinadehydriasis of the hepatopancreas of the crab *Carcinus moenas* L.). *It*

- Genovese, S.** (1962) M  
8-04162  
*Atti Soc. pelor.*, 7 (3/4) : 285-97

Analisi biometrica di una popolazione di *Mytilus galloprovincialis* Lamrk. (Moll. Lam.) vivente nella laguna veneta (Biometrical analysis of a population of *Mytilus galloprovincialis* Lamrk. (Moll. Lam.) living in the Venetian lagoon). *It En*

The population examined reaches a greater development than the one previously studied in the brackish lake of Ganzirri (Messina) but the morphological identity between the two populations appears equally evident.

- Genovese, S.** (1962) M  
8-04163  
*Atti Soc. pelor.*, 7 (3/4) : 335-53

Analisi biometrica di una popolazione di *Mytilus edulis* L. provenienti dal Mare del Nord (Norddeich/Ostfriesland) (Biometrical analysis of a population of *Mytilus edulis* L. from the North Sea (Norddeich/Ostfriesland). *It En*

The results were also compared with those obtained from two populations of mussels respectively from the brackish lake of Ganzirri (Messina) and from the lagoon of Venice.

M

**Albanese, M. P., F. Cannata & G. Costanzo** (1962)

8-04164

*Atti Soc. pelor.*, 7 (3/4) : 209-15

Esame citometrico degli oociti in accrescimento degli Echinodermi. Nota 4. Confronto tra le diverse specie (Cytometric study of the growing oocytes of the Echinodermata. 4. Comparison between the species). *It En*

Ci 62-01926. *Arbacia lixula*, *Sphaerechinus granularis*, *Paracentrotus lividus* differ, relatively to the nuclear values, from *Antedon rosacea* and, relatively to nucleolar ones, agree with the same sp., differing on the contrary from any previously studied sp.

M

**Albanese, M. P.** (1962)

8-04165

*Atti Soc. pelor.*, 7 (3/4) : 201-8

Manifestazioni nel nucleolo degli oociti in accrescimento di *Sphaerechinus granularis* Lamk. (Chief aspects of the nucleolus of the growing oocytes of *Sphaerechinus granularis* Lamk.). *It En*

Two chief aspects were found: one relative to the ribonucleoproteins and a following one in the vitellogenetic period relative to the presence of the nucleolonemal granules.

M

**Crisafi, P.** (1962)

8-04166

*Atti Soc. pelor.*, 7 (3/4) : 263-7

Nuove osservazioni sulla femmina di *Phyllopodopsyllus pauli* (Copepoda, Harpacticoida) e descrizione del maschio (New observations on the female of *Phyllopodopsyllus pauli*, Copepoda, Harpacticoida, and description of the male). *It En*

To this sp. belong shorter females with contracted fourth foot and longer ones with distended fourth foot. The male is considered as intermediate between the two related genera *Phyllopodopsyllus* and *Paraphyllopodopsyllus*.

M

**Antonini, E., A. Rossi-Fanelli & A. Caputo** (1962)

8-04167

*Boll. Soc. ital. Biol. sper.*, 37 (24 bis) : 1530

Peso molecolare della cluorocruorina di *Spirographis spallanzani* (Molecular weight of the chlorocruorine of *Spirographis spallanzani*). *It*

M

**Farina, B.** (1962)

8-04168

*Boll. Soc. ital. Biol. sper.*, 37 (24 bis) : 1703-5

Pirimidine nei corpi bianchi di *Octopus vulgaris* (Pyrimidine in the *corpora lutea* of *Octopus vulgaris*). *It*

M

**Leloup, E.** (1960)

8-04169

*Bull. Inst. océanogr. Monaco*, (1185) : 19 p.

Larves de cérianthaires de Monaco et de Villefranche-sur-Mer (Larvae of Ceriantheae from Monaco and Villefranche-sur-Mer)



**Carpine, C.** (1960) M  
8-04170

*Bull. Inst. océanogr. Monaco*, (1187) : 50 p.

Révision des connaissances sur la biologie et la prévention des xylophages marins (Revision of the knowledge on the biology and prevention of marine xylophages)

**Brinckmann, A.** (1962) M  
8-04171

*Pubbl. Sta. zool. Napoli*, 33 (1) : 1-9

The life cycle of *Merga galleri* sp. n. (Anthomedusae, Pandeidae). En De

Several colonies of a *Perigonimus*-like polyp have been found and the medusa has been reared. Both medusa and polyp proved to be a new sp. of the genus *Merga* Hartlaub 1913—Description.

**Ryland, J. S.** (1962) M  
8-04172

*Pubbl. Sta. zool. Napoli*, 33 (1) : 20-31

Some species of *Bugula* (Polyzoa) from the bay of Naples. En Fr

Five spp. of *Bugula* (*paucicori*, *aperta*, *turbinata* *spicata*, *calathus minor* and *fubus*) from the bay of Naples are described and a key is provided to facilitate identification.

**Grein, A. & C. Spalla** (1962) M  
8-04173

*Pubbl. Sta. zool. Napoli*, 33 (1) : 32-49

Ecologia ed esigenze nutritive della flora microbica del golfo di Napoli (Ecology and nutritional requirements of the microbe flora from the bay of Naples). It En

Technical methods employed are exposed, and the results of the observations of the microorganisms in bottom and water samples are given.

**Tardent, P.** (1962) M  
8-04174

*Pubbl. Sta. zool. Napoli*, 33 (1) : 50-63

Morphogenetic phenomena in the hydrocaulus of *Tubularia*. It En

Description of the regeneration process.

**Tortonese, E.** (1959) M  
8-04175

*Natura. Milano*, 50 (1) : 18-26

Osservazioni sul benthos del mar di Marmara (Observations on the benthos of sea of Marmara). It

List of invertebrates collected.

**Bolognari, A.** (1959)

M  
8-04176

*Boll. Zool.*, 26 : 21-8

Osservazioni al microscopio elettronico sul condrioma e sulle granulazioni acidofile e basofile delle cellule del corpo bianco dei molluschi cefalopodi (Electron miscoscopic observations on the condrioma and on the acidophil and basophil granulations of the cells in the white body of cephalopod molluses). *It Fr*

Difference between *Sepia officinalis* and *Octopus vulgaris*.

**Minganti, A.** (1959)

M  
8-04177

*Boll. Zool.*, 26 : 29-34

Studio citologico di andromerogoni ibridi *Ascidia malaca* ♀ × *Phallusia mamillata* ♂ (Ascidie) (Cytological investigation of androgenetic hybrids, *Ascidia malaca* ♀ × *Phallusia mamillata* ♂ (Ascidacea). *It En*

All of them contain only chromosomes of *Phallusia* in the haploid number  
Development of the embryos.

**Thomas, L. B.** (1962)

M  
8-04178

*Sea Frontiers*, 8 (2) : 103-8

Ugly duckling of the sea

Article on biology of holothurians, with reference to parasitization by *Carapus*; use for food, extracts as fish poison, shark repellent and inhibitor of tumor growth.

**G.L.V.** (1962)

M  
8-04179

*Sea Frontiers*, 8 (2) : 125

Panamic-Pacific Pelecypoda

Re 62-00169.

**Filho, H. M. & M. B. Kutner** (1962)

M  
8-04180

*Bol. Univ. Paraná (Bot.)*, (4) : 24 p.

Contribuição para o conhecimento das diatomáceas do manguesal do Alexandra (Contribution to the knowledge of the diatoms of the mangrove of Alexandra). *Pr En De*

Sixty-six species of diatoms were determined. Many species that occur in marine sediments and mangroves of some regions of the Atlantic coast of Africa were also observed, thus showing a possibility of hydrobiologic correlation.

**Boilly, B.** (1962)

M  
8-04181

*C.R. Acad. Sci., Paris*, 255 (17) : 2198-200

Origine des cellules dans la régénération postérieure de *Syllis amica* Quatrefages (Annélide Polychète) (The origin of cells during the posterior regeneration in *Syllis amica* Quatrefages (Annelida Polychaeta) )

Preliminary notes on histological studies verified by experimental results.

M

8-04182

**Crisafi, P.** (1959)*Boll. Zool.*, 26 : 59-68

Sulla *Oithona setigera* (Copepoda, Cyclopoida) dello stretto di Messina (On *Oithona setigera* (Copepoda, Cyclopoida) from the strait of Messina).  
It En

Concludes that *Oithona setigera* represents the type, whereas *O. challengerii*, *O. tropica* and *O. pelagica* must be considered as synonyms. *O. linearis* is a simple variety. The male hitherto described by Rosendorn belongs to another sp.

M

8-04183

**Sarà, M.** (1959)*Boll. Zool.*, 26 : 89-96

Sulla coesistenza di specie strettamente affini di Poriferi in biotopi litorali (On the coexistence of strictly related spp. of Porifera in littoral biotopes).  
It En

Nine spp. of elionids from Rovigno show a vertical and substrate-differentiation with eurytopic and stenotopic forms. Three spp. of *Clathrina* of the bay of Naples are distributed differently in relation to light and exposition.

M

8-04184

**Stefani, R.** (1959)*Boll. Zool.*, 26 : 115-20

Sulla variabilità ecologica di un idrozoo (*Campanaria caliculata* Hincks) (Ecological variability of the hydroid *Campanaria caliculata* Hincks). It En

Demonstrates the existence in the gulf of Cagliari of two different forms, living in different ecological niches.

M

8-04185

**Graziadei, P.** (1959)*Boll. Zool.*, 26 : 159-71

Ricerche sul sistema nervoso di molluschi cefalopodi (Researches on the nervous system in cephalopods). It Fr

Anatomical study.

M

8-04186

**Bolognari, A.** (1959)*Boll. Zool.*, 26 : 173-80

Struttura ed ultrastruttura del nucleolo degli oviciti del riccio di mare (*Paracentrotus lividus*) (Structure and ultrastructure of the nucleolus in oocytes of the sea urchin, *Paracentrotus lividus*). It Fr

Electron microscope observations.

**Sabbadin, A. (1959)**M  
8-04187*Boll. Zool.*, 26 : 221-43

Analisi genetica del policromatismo di *Botryllus schlosseri* (Pallas) Savigny (Ascidacea) (Genetic analysis of the polychromatism of *Botryllus schlosseri* (Pallas) Savigny—Ascidacea). *It En*

Description of the main colour markings and of their behaviour during the life of the colonies. The colour patterns, for which a genetic determination has been here demonstrated, are not specific characters but seem to represent a valuable tool of genetic analysis of the natural population of the sp.

**Leone, V. (1959)**M  
8-04188*Boll. Zool.*, 26 : 297-8

Sull'azione della ribonucleasi sullo sviluppo del riccio di mare (On the action of ribonucleasis on the development of the sea urchin). *It*

Disturbs the embryonal development and mainly the entoderm formation, without inducing animalization.

**Mancuso, V. (1959)**M  
8-04189*Boll. Zool.*, 26 : 329-39

Prime ricerche sulla ultrastruttura dell'uovo nelle ascidie (First researches on the ultrastructure of the eggs in ascidians). *It En*

Electron microscope observations of the cytoplasmic constituents of the unfertilized eggs of *Ciona intestinalis*.

**Ortolani, G. (1959)**M  
8-04190*Boll. Zool.*, 26 : 341-8

Ricerche sulla induzione del sistema nervoso nelle larve delle ascidie (Researches on the induction of the nervous system in the larval stages of ascidians). *It En*

Shows that in *Phallusia mamillata* the nervous system is not determined at the 64-cell stage. A few blastomeres may exert a neural induction, and such blastomeres are those which give rise to the archenteron roof of the gastrula.

**Minganti, A. (1959)**M  
8-04191*Boll. Zool.*, 26 : 349-55

Trapianto di blastomeri di ibridi letali di ascidie su embrioni normali (Transplantation of blastomeres from lethal hybrids of ascidians to normal embryos). *It En*

No evidence of revitalization has been shown by the transplanted blastomeres, which seemed unable to carry out the morphogenetic movements and to differentiate.



- Fanriella Ferruzza, N.** (1959) M  
8-04192  
*Boll. Zool.*, 26 : 357-63  
 Fenomeni di induzione nelle ascidie (Induction of spinal chord in ascidians). *It En*

The spinal chord is induced by a simple cell of the 64-cell stage. The induction can be produced either by chordal or by eutodermal cells.

- Stagni, A.** (1959) M  
8-04193  
*Boll. Zool.*, 26 : 397-403  
 Fenomeni rigenerativi e origine degli elementi germinali in *Spirorbis pagenstecheri* (Regeneration and germinal elements in *Spirorbis pagenstecheri*)

Posterior regeneration in this polychaete is easily and quickly obtained. The regenerated somites rise from vessel neoblasts.

- Sarà, M.** (1960) M  
8-04194  
*Boll. Zool.*, 27 : 51-65  
 Aspetti e problemi di una ricerca sinecologica sui Poriferi del golfo di Napoli (Problems about a synecological study on Porifera of the gulf of Naples). *It Fr*

Importance of a comparative synecological research in the various biotopes of the gulf.

- Hasegawa, Y.** (1962) M  
8-04195  
*Bull. Hokkaido reg. Fish. Res. Lab.*, (24) : 116-38  
 An ecological study of *Laminaria angustata* Kjellman on the coast of Hidaka prov., Hokkaido

- Voss, G. L. & C. Phillips** (n.d.) M  
8-04196  
*Contr. Mar. Lab. Univ. Miami*, (203) : 223-32  
 A first record of *Octopus macropus* Risso from the United States with notes on its behavior, color, feeding and gonads

- L'Hardy, J.-P. & C. Quiévreux** (1962) M  
8-04197  
*C.R. Acad. Sci., Paris*, 255 (17) : 2173-5  
 Remarques sur le "polymorphisme" de *Spirorbis borealis* Daudin (Remarks on the "polymorphism" of *Spirorbis borealis* Daudin)

Preliminary note based on observations of natural populations of Rosecoff (Finistère); identifies and briefly describes five forms.

- Serenkov, G. P. & M. V. Pakhomova** (1960) MF  
8-04198  
*Vestn. mosk. Univ.*, (IV), 15 (6) : 15-25  
 Nitrogen compounds of algae

WFA 13 (3) : 45. Seaweeds—chemical composition.

**Wilson, I. M.** (1962)

*Trans. Brit. mycol. Soc.*, 45 (2) : 286-7

Fungi in oceans and estuaries

Re 62-04781.

MF  
8-04199

**Wootton, J. A. & MacMullen** (1962)

Thesis, Cornell Univ., 156 p.

The utilization of melavonic acid by species of invertebrate animals

DA 23 (2) : 423. Species from eight phyla and two chordate groups were treated with 2-C<sup>14</sup> melavonic acid to determine whether or not the sterol nucleus can be biosynthesized by these animals: *Euglena gracilis*, *Cliona celata* and *Sycon coronatum*, *Nereis diversicolor*, *Buccinum undatum*, *Venerupis rhomboides*, *Carcinus maenas* and *Leander serratus*, *Asterias rubens*.

MF  
8-04200

**Grassé, P.-P.** (Ed.) (1961)\*

Paris, Masson & Cie, 944 p.

Traité de zoologie. Anatomie, Systématique, Biologie. Tome 4. 1er fascicule: Plathelminthes, Mésozoaires, Acanthocéphales, Némertiens (Treatise on Zoology. Anatomy, Systematics, Biology. Vol. 4. First fascicule: Plathelminthes, mesozoans, acanthocephalans, nemerteans)

MF  
8-04201

**Graham, A.** (1962)

*Nature, Lond.*, 195 (4848) : 1239

Treatise on zoology

Re 8-04201.

MF  
8-04202

**Dzhamusova, T. A.** (1960)

*Tsitologiya*, 2 : 561-70

(Thermostability of muscle tissue as a cytophysiological indication of terrestrial species of molluscs). *Ru*

IABS 26 (3) 6674. Investigations on representatives of twenty spp. belonging to genera *Succinea*, *Eulota*, *Circassina*, *Fruticocampylaea*, *Theba*, *Helix*, *Helicella*, *Caucasotachea* and *Eobania*, also in 3 variants of *Caucasotachea calligera*.

MF  
8-04203

**Aleem, A. A.** (1961)

*Vie et Milieu*, 12 (3) : 497-506

Effect of salinity on the growth and reproduction of a brackish water *Spirogyra*—*Spirogyra salina* n. sp.

Observations on culture and ecology.

MF  
8-04204

MF

8-04205

**Laubier, L.** (1962)*Vie et Milieu*, 13 (1) : 123-59

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- M  
8-04389
- Mužinić, R.** (1961)  
*Proc. gen. Fish. Coun. Medit.*, 6 : 71-83  
 On the formation of rings and growth zones on sardine scales (*Sardina pilchardus* Walb.). Fr  
 CR 61-00412.
- M  
8-04390
- Gottlieb, E.** (1961)  
*Proc. gen. Fish. Coun. Medit.*, 6 : 93-106  
 On the selection of *Upeneus molluccensis* and *Mullus barbatus* by trawl cod-ends in the Israeli fisheries. Fr  
 CR 61-00414.
- M  
8-04391
- Hure, J.** (1961)  
*Proc. gen. Fish. Coun. Medit.*, 6 : 107-10  
 Contribution à la connaissance de la ponte de la sardine et du maquereau au large de l'Adriatique moyenne (Contribution to the knowledge of the spawning of sardine and mackerel off the middle Adriatic coast.). En  
 CR 61-00415.
- M  
8-04392
- Gamulin, T. & D. Zavodnik** (1961)  
*Proc. gen. Fish. Coun. Medit.*, 6 : 121-4  
 Spawning of the sardine (*Sardina pilchardus* W.) off the west coast of Istria (northern Adriatic). Fr  
 CR 61-00417.
- M  
8-04393
- Županović, S.** (1961)  
*Proc. gen. Fish. Coun. Medit.*, 6 : 145-50  
 Contribution à la connaissance de la biologie de *Merluccius merluccius* L. dans l'Adriatique moyenne (Contribution to the knowledge of the biology of *Merluccius merluccius* L. in the middle Adriatic). En  
 CR 61-00421.

- Županović, S.** (1961) M  
8-04394  
*Proc. gen. Fish. Coun. Medit.*, 6 : 137-43  
 Influence des facteurs physiques sur les déplacements des poissons  
 (Influence of physical factors on the movements of fishes). En

CR 61-00420.

- Morović, D.** (1961) M  
8-04395  
*Proc. gen. Fish. Coun. Medit.*, 6 : 155-7  
 Contribution à la connaissance de la nutrition du thon rouge (*Thunnus thynnus* L.) dans l'Adriatique, d'après les prises faites à la senne tournante  
 (Contribution to the knowledge of the nutrition of blue-fin tuna, *Thunnus thynnus* L., in the Adriatic from fishes caught with ring nets). En

CR 61-00423.

- Matta, F.** (1961) M  
8-04396  
*Proc. gen. Fish. Coun. Medit.*, 6 : 159-62  
 Preliminary note on the catching of soles by the "rapido" trawl net.  
 Fr

CR 61-00424.

- Spain. Instituto Español de Oceanografía** (1961) M  
8-04397  
*Proc. gen. Fish. Coun. Medit.*, 6 : 175-82  
 Variations saisonnières dans la composition de la sardine méditerranéenne  
 et atlantique (Seasonal variations in the chemical composition of the Mediter-  
 ranean and Atlantic sardine). En

CR 61-00427.

- Mozzi, C. & A. Duo** (1961) M  
8-04398  
*Proc. gen. Fish. Coun. Medit.*, 6 : 189-96  
 Observations sur les sardines (*Sardina pilchardus* Walb.) de la haute  
 Adriatique débarquées à Chioggia en 1958 (Observations on the sardines,  
*Sardina pilchardus* Walb., from the upper Adriatic, landed at Chioggia in  
 1958). En

CR 61-00429.

- Demir, M. & N. Demir** (1961) M  
8-04399  
*Proc. gen. Fish. Coun. Medit.*, 6 : 213-8  
 Contribution to the knowledge of the eggs of the common bonito (*Sarda sarda* Bloch). Fr

CR 61-00433.

**Demir, M.** (1961)

M

8-04400

*Proc. gen. Fish. Coun. Medit.*, 6 : 219-20Note on *Germo alalunga* Gml. and *Euthynnus alletteratus* Raf. in the Sea of Marmara. Fr

CR 61-00434.

**Demir, M. & N. Demir** (1961)

M

8-04401

*Proc. gen. Fish. Coun. Medit.*, 6 : 221-3Note on the sardine (*Clupea pilchardus* Walb.) and its reproduction in the Sea of Marmara. Fr

CR 61-00435.

**Grubisić, F.** (1961)

M

8-04402

*Proc. gen. Fish. Coun. Medit.*, 6 : 233-5

Length of purse-seine and size of sardine schools. En

CR 61-00438.

**Demirhindi, U.** (1961)

M

8-04403

*Proc. gen. Fish. Coun. Medit.*, 6 : 253-9Nutrition of the sardine (*Sardina pilchardus* Walb.). Fr

CR 61-00442.

**Ben Tuvia, A.** (1961)

M

8-04404

*Proc. gen. Fish. Coun. Medit.*, 6 : 271-8Catch per unit of effort of *Sardinella aurita* along the coast of Israel during the years 1950-1959. Fr

CR 61-00445.

**Scaccini, A.** (1961)

M

8-04405

*Proc. gen. Fish. Coun. Medit.*, 6 : 291-2

Sur le phototropisme des thons (On the phototropism of tunas). En

CR 61-00450. Abstract only.

**Scaccini, A.** (1961)

M

8-04406

*Proc. gen. Fish. Coun. Medit.*, 6 : 293-4

Considérations sur les déplacements et la distribution des jeunes thons en Adriatique (Remarks on the déplacements and distribution of young tunas in the Adriatic Sea). En

CR 61-00451.



- M  
8-04407
- Atli, M. & F. Erman** (1961)  
*Proc. gen. Fish. Coun. Medit.*, 6 : 303-22  
 On the biology of sardine (*Sardina pilchardus* Walb.). Fr  
 CR 61-00453.
- M  
8-04408
- Belloc G.** (1961)  
*Proc. gen. Fish. Coun. Medit.*, 6 : 345-71  
 Inventaire des madragues méditerranéennes (Inventory of the Mediterranean tuna traps)
- M  
8-04409
- Essapian, F. S.** (1962)  
*Norsk Hvalfangst-tid.*, 51 (9) : 341-4  
 An albino bottle-nosed dolphin, *Tursiops truncatus*, captured in the United States  
 Describes the operation of capture, the animal and its normal colored calf now kept at the marine aquarium of Miami.
- M  
8-04410
- Fiennes, R. N. T.-W.** (1962)  
*New Scient.*, 16 (309) : 148-9  
 A penguin health problem  
 General review on a disease of penguins in zoos: *Aspergillus fumigatus*, or the related *A. flavus* or *A. nidulans*.
- M  
8-04411
- Moisey, P. A.** (Israel Program for Scientific Translations,  
 Jerusalem, Transl.) (1962)  
 PST Cat. No. 354 : 10 p.  
 Factors of population dynamics of the commercial fauna in the northwest Pacific Ocean
- M  
8-04412
- Trewavas, E.** (1962)  
*Ann. Mag. nat. Hist.* (13), 5 (51) : 167-76  
 A basis for classifying the sciaenid fishes of tropical West Africa  
 Ci 60-3423. West African spp. compared with members of family from other parts of world, and concluded that sciaenid spp. can be grouped into genera or tribes on basis of structure of air-bladder where this is complex. Purpose of this note is to give brief justification for generic groupings and nomenclature which result from the application of this principle to the 9 spp. confined to tropical West African waters. This nomenclature has been accepted in principle by Longhurst—1957, 1959—but Collignon—1959, 1960—has published a classification which differs very little from older ones and ignores air-bladder.

- M  
8-04413
- Hoffmeister, H. et al.** (1961)  
*Z. Zellforsch.*, 55 : 810-7  
 (Secretory granules in branchial heart of *Myxine glutinosa*). Fr  
 IABS 26 (2) 4282.
- M  
8-04414
- Film** (1960)  
 Alaska Department of Fish and Game—Support Building, Juneau, Alaska  
 The king crab story  
 16 mm, colour, sound, 30 min. Shows the importance of the king crab industry in Kodiak Island's economy.
- M  
8-04415
- Bargmann, W. & A. Knoop** (1961)  
*Z. Zellforsch.*, 55 : 577-96  
 (Saccus vasculosus of fish: further studies). De  
 IABS 26 (2) 4301. Secretory activity confirmed in several species. No activity observed in *Cottus bubalis*.
- M  
8-04416
- Mellinger, J.** (1962)  
*C.R. Acad. Sci., Paris*, 255 (15) : 1789-91  
 Existence de plusieurs systèmes neurosécrétoires hypothalamo-hypophysaires chez les poissons elasmobranches *Scyliorhinus caniculus* et *Sc. stellaris*. Microscopie ordinaire et microscopie électronique (On the existence of various hypothalamus-hypophysis systems in Elasmobranchii *Scyliorhinus caniculus* and *Sc. stellaris*. Ordinary microscopy and electronic microscopy)  
 Preliminary note based on material collected at Wimereux, France.
- M  
8-04417
- Clarke, R.** (1963)  
*FAO Fish. Biol. tech. Pap.*, (32) : 26 p.  
 Observación y marcación de ballenas frente a la costa de Chile en 1958 y desde Ecuador hacia las Islas Galápagos y más allá en 1959 (Whale observation and whale marking off the coast of Chile in 1958 and from Ecuador towards and beyond the Galápagos Islands in 1959)  
 Es 8-02358.
- M  
8-04418
- Schöne, H.** (1961)  
*Biol. Bull., Woods Hole*, 121 : 354-65  
 Learning in the spiny lobster *Panulirus argus*  
 IABS 26 (3) 6450.
- M  
8-04419
- Protasov, V. R. & M. I. Aronov** (1960)  
*Biofizika (En Transl.)*, 5 : 851-3  
 Biological significance of sounds of certain Black Sea fish  
 IABS 26 (1) 2093. En 61-10925.

- Laurie, J. S.** (1961) M  
8-04420  
*Comp. Biochem. Physiol.*, 4 : 63-71  
 Carbohydrate absorption in cestodes from elasmobranch fishes

IABS 26 (1) 2248. Eight spp. from *Lacistorhynchus*, *Calliobothrium*, *Onchobothrium*, *Phyllobothrium*, *Anthobothrium*, *Inermiphylloidium*, *Orygmato-*  
*bothrium*, *Disculiceps*, absorbed glucose and galactose.

- Kisaburo Taguchi** (1961) M  
8-04421  
*Bull Jap. Soc. sci. Fish.*, 27 : 637-40  
 (On the growth of catchable salmon in offshore waters). Ni En

IABS 26 (1) 2292.

- Nouvel, H.** (1961) M  
8-04422  
*Vie et Milieu*, 12 (3) : 565-74

Un dicyémide nouveau, *PLEODICYEMA delamarei* n.g., n.sp., parasite du céphalopode *Bathypolypus sponsalis*. Remarques sur la validité des genres *Dicyemodeca* Wheeler, *Pseudicyema* Nouvel, et *Microcyema* v. Beneden (A new dicyemid, *PLEODICYEMA delamarei* n.g., n.sp., parasite of the cephalopod *Bathypolypus sponsalis*. Remarks on the validity of the genera *Dicyemodeca* Wheeler, *Pseudicyema* Nouvel and *Microcyema* v. Beneden)

Contains description of the species.

- Théodoridès, J.** (1962) M  
8-04423  
*Vie et Milieu*, 13 (1) : 95-122

Grégarines d'invertébrés marins de la région de Banyuls. 1. Eugrégarines parasites de crustacés décapodes (Gregarines from marine invertebrates from the Banyuls region. 1. Eugregarines parasites of decapod crustaceans)

Lists the spp. of parasites and their hosts.

- Knoepfler, L.-P.** (1962) M  
8-04424  
*Vie et Milieu*, 13 (2) : 327-31

Une curieuse anomalie de la carapace chez *Caretta caretta caretta* (Linnaeus 1758) (A curious anomaly of the carapace in *Caretta caretta caretta* (Linnaeus 1758) )

Anomaly caused by changes in the anatomy.

- Schaefer, M. B.** (1962) M  
8-04425  
*Pesca, Lima (Yearb.)*, 1961-1962 : 119-21  
 La pesca del atún tropical (The tropical tuna fishery)

Discusses the basis of the proposed recommendations for regulation of yellowfin tuna.

- M  
8-04426
- Saetersdal, G.** (n.d. 1962)  
*Pesca, Lima (Yearb.)*, 1961-1962 : 91-5  
 El futuro de la anchoveta (The future of anchovy)

Brief account of Japanese and Californian sardine and Norwegian herring fisheries and their fluctuations, and discussion of fluctuations and overfishing of the Peruvian anchovies.

- M  
8-04427
- King, J. E.** (1962)  
*Norsk Hvalfangst-tid.*, 51 (3) : 10420  
 Some of the aquatic modifications of seals. No

Otariid and phocid shape and swimming, temperature regulation, senses, respiratory system, kidneys, vascular system and diving.

- M  
8-04428
- Brown, S. G.** (1962)  
*Norsk Hvalfangst-tid.*, 51 (3) : 93-103

International co-operation in Antarctic whale marking 1957 to 1960, and a review of the distribution of marked whales in Antarctica. No

- M  
8-04429
- Schevill, W. E.** (1962)  
*Norsk Hvalfangst-tid.*, 51 (4) : 141-50  
 Cetacea (the whales). No

General article covering living Cetacea, reproduction, swimming and diving, food and feeding, senses, respiration and voice.

- M  
8-04430
- Smith, J. L. B.** (1962)  
*Ichthyol. Bull.*, (25) : 469-502

Fishes of the family Gaterinidae of the western Indian Ocean and the Red Sea with a resumé of all known Indo-Pacific species

Description of genera and species and keys to identification.

- M  
8-04431
- de la Fouchardière, G.** (1961)  
*Bull. franç. Piscic.*, 33 (201) : 137-43

Effets physiologiques des explosions sur les animaux aquatiques (Physiological effects of explosions on aquatic animals)

Effects on fishes, molluscs, crustaceans and various other invertebrates.

- M  
8-04432
- Smith, J. L. B.** (1961)  
*Ichthyol. Bull.*, (22) : 373-418

Fishes of the family Apogonidae of the western Indian Ocean and the Red Sea

Keys to identification of subfamilies, genera and species and description of the same.



- Brunel, P.** (1961) M  
8-04433  
*Cah. Inform. Sta. Biol. mar. Grande-Rivière*, (7) : 9 p.

Liste taxonomique des invertébrés marins des parages de la Gaspésie identifiés au 3 août 1959 (Taxonomic list of marine invertebrates of the Gaspé region identified on 3 August 1959)

- Barahona, V. A.** (1959) M  
8-04434  
*An. Univ. Valparaíso*, (6) : 176 p.

El género *Sardinops* en el litoral norte de Chile (The genus *Sardinops* on the northern coast of Chile)

Taxonomy, distribution, statistics, fishing grounds and methods.

- F. de T.** (1962) M  
8-04435  
*Puntal*, 9 (95) : 12-3

La pesca industrial de la langosta en Cuba (Industrial fishing of spiny lobster in Cuba)

Distribution, habitat, commercial value.

- Holthuis, L. B. & F. A. Villalobos** (1961) M  
8-04436  
*An. Inst. Biol. Univ. Méx.*, 32 (1-2) : 251-76

*Panulirus gracilis* Streets y *Panulirus inflatus* (Bouvier), dos especies de langosta (Crustacea, Decapoda) de la costa del Pacifico de America (*Panulirus gracilis* Streets and *Panulirus inflatus* (Bouvier), two species of spiny lobster (Crustacea, Decapoda) of the Pacific coast of America)

Enumerates the characteristics of the species, discusses their nomenclature, synonymy, distribution and economic importance.

- Caballero y C., E. & M. B. Hollis** (1961) M  
8-04437  
*An. Inst. Biol. Univ. Méx.*, 32 (1-2) : 201-17

Trematodos de peces de aguas mexicanas del Pacifico. 20. Tres especies de Monogenoidea Bychowsky, 1937 (Trematodes of fishes of Mexican Pacific waters. 20. Three species of Monogenoidea Bychowsky, 1937)

Ci 62-01516, Ci 61-05988. Taxonomic descriptions of *Diplectanum americanum*, *Loimos winteri* n. sp. and *Mexicana littoralis* n. sp.

- Lamothe, R. A.** (1961) M  
8-04438  
*An. Inst. Biol. Univ. Méx.*, 32 (1-2) : 219-33

Estudio de dos trematodos digeneos de peces del Golfo de California, Mexico (Study of two digenous trematodes of fishes of the Gulf of California, Mexico)

*Genolinea laticauda* and *Pseudolepidapedon sinaloense* are redescribed from the hosts *Kyphosus elegans* and *Verrunculus polylepis*.

M

**Nikolov, D. Khr.** (1960)

8-04439

*Trud. nauch.-izsled. Inst. Rib. Prom. Varna*, 3 : 91-115Biologiya na palamida (*Sarda sarda* (Bloch)) v Chernomore (Biology of the bonito *Sarda sarda* (Bloch) from the Black Sea). Bu Ru De

M

**Georgiev, Zh. M.** (1960)

8-04440

*Trud. nauch.-izsled. Inst. Rib. Prom. Varna*,Nov vid za bulgarskata ikhtiofauna—*Euthynnus alletteratus* (Raf.)—maluk tunets (New species for the Bulgarian ichthyofauna—*Euthynnus alletteratus*—little tunny). Bu Ru Fr

M

**Epshtein, V. N.** (1962)

8-04441

*Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1121-4

A review of the fish leeches Hirudinea, Piscicolidae, from the northern seas of SSSR

*En* 62-04750. Based on examination of extensive material in Zoological Institute, USSR Academy of Science from collections by polar expeditions 1898-1948, and 1960. Gives spp. lists and distribution notes.

MF

**Chagas, C. & A. Paes de Carvalho** (1961)

8-04442

New York, Elsevier Publ. Co., 414 p

Bioelectrogenesis

Contents: 1. Morphological data on electric organs (4 papers). 2. Physiology of electric organs (6 papers). 3. The nervous control of the discharge (3 papers). 4. Ecology of electric fishes (1 paper). 5. Basic mechanisms of production of discharge (12 papers). List of contributors. Subject index. Contains 816 literature references.

M

**Unar, M.** (1959)

8-04443

*Berita Perik.*, 11 (4-5-6) : 88-90

Masalah perikanan karang (Nuro-ami fishing). Bah Ind

Description of industry in the bay of Djakarta. Principal species: *Caesio erythrogaster*, *C. diagramma* and *C. crysezonus*.

M

**Bucci, E. & C. Fronticelli** (1962)

8-04444

*Boll. Soc. ital. Biol. sper.*, 37 (24 bis) : 1765-8

Caratteristiche spettrofotometriche dell'emoglobina e mioglobina di tonno (Spectrophotometrical characteristics of hemoglobin and myoglobin in tuna).

It

M

**Fronticelli, C. & E. Bucci** (1962)

8-04445

*Boll. Soc. ital. Biol. sper.*, 37 (24 bis) : 1771-3

Denaturazione in ambiente alcalino dell'emoglobina e mioglobina di tonno (Denaturation of hemoglobin and myoglobin of tunas under special conditions).

It

M

**Castellani Pastoris, M.** (1962)

8-04446

*Parassitologia*, 4 (1) : 59-67Elminti rinvenuti in *Box boops* dei mari italiani (Helminths found in *Box boops* from Italian seas). *It*

List of parasites found. Among them trematodes of the genus *Axine* and *Monorcheides* not yet observed in that fish, and some cestode larvae.

M

**Genovese, S. & V. Alonzo** (1962)

8-04447

*Atti Soc. pelor.*, 7 (3/4) : 299-304

Sul contenuto stomacale di tonni (*Thunnus thynnus* L.) catturati nello stretto di Messina ed in alcune tonnare della Sicilia e della Calabria (On the stomach contents of tuna (*Thunnus thynnus* L.) caught in the strait of Messina and in some madragues of Sicily and Calabria). *It En*

pH measurements taken on the stomach contents of some of the tunas examined.

M

**Chieffi, G., F. Della Corte & V. Botte** (1962)

8-04448

*Atti Soc. pelor.*, 7 (3/4) : 393-7

Ricerca istochimica dell'attività della steroide  $3\beta$ -olo deidrogenasi nel testicolo di *Torpedo marmorata* Risso e di *Scyliorhinus stellaris* (L.) (Histochemical research of the steroid  $3\beta$ -olo-dehydrogenase activity in the testis of *Torpedo marmorata* Risso and *Scyliorhinus stellaris* (L.)). *It En*

The findings further confirm the homology of the interstitial cells of the elasmobranch with Leydig's cells of the higher vertebrates.

M

**Schiff, H.** (1962)

8-04449

*Pubbl. Sta. zool. Napoli*, 33 (1) : 10-9

Wirkung des Cephalotoxins und anderer Pharmaka auf die glatte Muskulatur von *Octopus vulgaris* L. und auf das Zentralnervensystem von *Squilla mantis* L. (Effect of cephalotoxin and other products on the muscles of *Octopus vulgaris* L. and on the central nervous system of *Squilla mantis* L.). *De En*

The paralysis of the crabs due to cephalotoxin could be explained by an abolition of coordination in the central nervous system, an increase of inhibitory impulses, and asphyxia caused by cephalotoxin or a blocking of the synapses.

M

**Cavaliere, A.** (1962)

8-04450

*Boll. Pesca Piscic. Idrobiol.*, 15 (2) : 171-6

Notizie su biologia e pesca di *Tetrapturus belone* Raf., cenni sull'adulto e descrizione di un suo rarissimo stadio giovanile (Contribution to the knowledge of the biology and catch of *Tetrapturus belone* Raf., morphometric data of a grown-up specimen and description of a very rare juvenile stage). *It Fr En*

**Genovese, S.** (1962)M  
8-04451*Boll. Pesca Piscic. Idrobiol.*, 15 (2) : 177-89Sul regime alimentare di *Thunnus thynnus* (L.) (On the alimentary regimen of *Thunnus thynnus* (L.)). *It Fr En*

Tuna in the full sexual maturity refuse food, and progressively acquire their capacity of feeding in relation to the fractional delivery of their sexual products. The intergenetic tuna is an active plunderer and its nourishment is mainly formed by fishes.

**Bini, G.** (1962)M  
8-04452*Boll. Pesca Piscic. Idrobiol.*, 15 (2) : 225-36Sull'identità della *Cerna chrysotaenia* Doderlein (On the identity of *Cerna chrysotaenia* Doderlein). *It Fr En*

*Epinephelus chrysotaenia* Doderlein in the opinion of the author is the adult form of *Epinephelus alexandrinus* Cuv. & Val.—the former therefore is not a valid sp.

**Anon.** (1962)M  
8-04453*Sea Frontiers*, 8 (2) : 108

Now a sea-cow repellent!

Short note on use of synthetic scent of lion to repel Sirenacea damaging sugar cane crops in S. Africa.

**Tinbergen, N.** (1960)\*M  
8-04454

New York, Basic Books Inc., 255 p.

The herring gull's world

**C.P.I.** (1962)M  
8-04455*Sea Frontiers*, 8 (2) : 124

The herring gull's world

Re 8-04454.

**Chieffi, G. & L. Gualà** (1959)M  
8-04456*Boll. Zool.*, 26 : 121-8Origine preovulatoria dei corpi lutei in *Torpedo marmorata* (Preovulatory origin of the corpora lutea in *Torpedo marmorata*). *It En*

Histogenesis of the corpora lutea, suggests that the reproductive cycle may be controlled by the ovary through an endocrine mechanism.



**Renzoni, A.** (1959)

M

*Boll. zool.*, 26 : 203-5

8-04457

Fosfatasi alcalina nell'apparato gastrointestinale di *Scyliorhinus canicula* e *stellaris* (Presence of alkaline phosphatase in the alimentary tract of *Scyliorhinus canicula* and *stellaris*). It En

Concludes that the absorption of food takes place almost exclusively in the spiral valve.

M

**Vasconcelos, M. S. & M. L. Paes da Franca** (1962)

8-04458

Contribuição para um melhor conhecimento do genero *Aulostomus* (Teleostei Aulostomoidei) (Contribution to the knowledge of the genus *Aulostomus* (Teleostei Aulostomoidei)). En

Taxonomic study of the genus based on a small sample from Cape Verde.

M

**Shiino, S. M.** (1959)\*

8-04459

*Rep. Univ. Mie*, (2) : 3 (1) : 1-34

Revision der auf Goldmakrele, *Coryphaena hippurus* L., schmarotzenden Caligidenarten (Revision of the caligid species parasitizing on the dolphin *Coryphaena hippurus* L.)

M

**Roux, Ch.** (1961)\*

8-04460

*Bull. Inst. Pêch. marit. Maroc*, (7) : 33-44

Résumé des connaissances actuelles sur *Katsuwonus pelamis* (Linné) (Summary of the actual knowledge of *Katsuwonus pelamis* (Linné))

M

**Collignon, J.** (1961)\*

8-04461

*Bull. Inst. Pêch. marit. Maroc*, (7) : 55-

Thazard ou melva dans l'Atlantique Oriental (Thazard or frigate mackerel in the western Atlantic)

M

**de Vildoso, A. Chirinos** (1960)\*

8-04462

*Pesca y Caza, Lima*, (10) : 111-4

Casos de hermafroditismo en el bonito *Sarda chilensis* (C. & V.) (Cases of hermaphroditism in the bonito *Sarda chilensis* (C. & V.))

M

**Anon.** (Israel Program for Scientific Translations, Jerusalem, Transl.) (1961)

8-04463

155 p.

Herring; selected articles from Soviet periodicals

Available from the Office of Technical Services, U.S. Department of Commerce, Washington.

- Wilson, R. C. & T. S. Austin** (1959) M  
8-04464  
*Pacif. Fisherm.*, 57 (1) : 29-31  
 Tuna season in the Marquesas

Results of survey of abundance of tuna in the Marquesas group and Tuamotu archipelago.

- Lima, F. R. & J. P. Wise** (1962)\* M  
8-04465  
*Bol. Estuér. Pesca, Recife*, 2 (10) : 12-7

Primeiro estado da abundancia e distribuição da albacora de laje e da albacora branca na região ocidental do oceano atlântico tropical (1957-1961) (A first examination of the abundance and distribution of yellowfin and albacore tuna in the western tropical Atlantic, 1957 to 1961). *Pr*

- Rosa, H., Jr.** (Ed.) (1963) M  
8-04466  
*FAO Fish Rep.*, (6), vol. 3 : 977-1851

Proceedings of the world scientific meeting on the biology of tunas and related species, La Jolla, California, U.S.A., 2-14 July 1962

Pr 61-228me. Co 8-03362. Methodological and experience papers. Contains 8-04467 to 8-04523.

- Collette, B. B. & R. H. Gibbs, Jr.** (1963) M  
8-04467  
*In* 8-04466 : 977-8

A preliminary review of the fishes of the family Scombridae. *Fr Es*

Abstr. only. Text in 62-05722.

- Yabe, H., Y. Yabuta & S. Ueyanagi** (1963) M  
8-04468  
*In* 8-04466 : 979-1009

Comparative distribution of eggs, larvae and adults in relation to biotic and abiotic environmental factors. *Fr Es*

Discusses geographical distribution, vertical distribution, effects of environmental factors.

- Marr, J. C.** (1963) M  
8-04469  
*In* 8-04466 : 1011-1021  
 Subpopulation identification. *Fr Es*

Discusses methodology, important advances, remaining problems.

- Hamre, J.** (1963) M  
8-04470  
*In* 8-04466 : 1023-39  
 Size and composition of tuna stocks. *Fr Es*

Discusses methods of age determination, methods of calculating growth, growth estimates of tunas, recruitment and reproduction, mortality.

- M  
8-04471
- Howard, G. V.** (1963)  
*In* 8-04466 : 1041-55  
 The matter of availability and the harvest of tunas. Fr Es

Discusses the problem, availability and oceanography, vulnerability and behavior, future research.

- M  
8-04472
- Magnuson, J. J.** (1963)  
*In* 8-04466 : 1057-66  
 The behavior and physiology, a review. Fr Es

Discusses feeding behavior, schooling behavior, associations, migratory behavior, locomotion, reproductive behavior, sensory perception, physiology, methods of study, the future.

- M  
8-04473
- Takayama, S.** (1963)  
*In* 8-04466 : 1067-76  
 Fishing techniques for tunas and skipjack. Fr Es

Discusses major types of fishing techniques, major types of fishing boats and their equipment, comparative effectiveness, selectivity of various types of gear, lines for future work.

- M  
8-04474
- Schaefer, M. B.** (1963)  
*In* 8-04466 : 1077-86  
 Statistics of catch and effort required for scientific research on the tuna fisheries. Fr Es

Discusses uses of statistics of catch and effort, requirements, methods of collection of data, exchange of data and information; makes recommendations.

- M  
8-04475
- Uda, M.** (1963)  
*In* 8-04466 : 1087-95  
 Future lines of tuna research, mainly in relation to fisheries oceanography. Fr Es

Discusses future prospects of tuna fishing areas, future lines of tuna research, what has been accomplished by tuna oceanography, tuna fisheries forecasting, methods of data collection.

- M  
8-04476
- Chapman, W. M.** (1963)  
*In* 8-04466 : 1097-1107  
 World-wide tuna research planning. Fr Es

Discusses preceding tuna conferences, population dynamics, conservation problems, harvesting problems; makes recommendations.

M

**Da Fonseca, J. B. G.** (1963)

8-04477

*In* 8-04466 : 1109-12

Preliminary experiments with tilapia as bait in the tuna fishery off the coast of Brazil. Fr Es

M

**Nishimura, M.** (1963)

8-04478

*In* 8-04466 : 1113-23

Investigation of tuna behavior by fish finder. Fr Es

Discusses fish finder for tuna investigation, identification of tuna, swimming depth, speed and school density.

M

**Hamre, J.** (1963)

8-04479

*In* 8-04466 : 1125-32

Tuna tagging experiments in Norwegian waters. Fr Es

Discusses tagging program, results.

M

**Hamuro, C.** (1963)

8-04480

*In* 8-04466 : 1133-42

Measurement of the shape of the tuna longline and an analysis of its efficiency. Fr Es

Discusses shape and hook-depth of longline, branch line movement and its hook rate, biting period and reaction of tuna, relation between water temperature and depth of hooked tuna, influence of waves on behavior of hooks.

M

**De Vildoso, A. C.** (1963)

8-04481

*In* 8-04466 : 1143-52Estudios sobre la reproducción del bonito *Sarda chilensis* (C. & V.) en aguas adyacentes a la costa peruana (Studies of the reproduction of the bonito *Sarda chilensis* (C. & V.) in Peruvian waters). En Fr

Discusses methods, determination of the sexual cycle, type and presence of spawning, fertility.

M

**Watson, M. E.** (1963)

8-04482

*In* 8-04466 : 1153-4Tunas (genus *Thunnus*) of the western North Atlantic. Part 1. Key to the species of *Thunnus* based on skeletal and visceral anatomy. Fr EsAbstr. only. Issued also as: *Contr. Woods Hole oceanogr. Instn.*, (1256).



# AQUATIC STOCKS

M  
8-04483

**Mather, F. J., III** (1963)  
In 8-04466 : 1155-7

Tunas (genus *Thunnus*) of the western North Atlantic. Part 2. Description, comparison and identification of species of *Thunnus* based on external characters. Fr Es

Co 8-04482. Abstr. only. Issued also as: *Contr. Woods Hole oceanogr. Instn.* (1257).

M  
8-04484

**Mather, F. J., III** (1963)  
In 8-04466 : 1159-61

Tunas (genus *Thunnus*) of the western North Atlantic. Part 3. Distribution and behavior of *Thunnus* species. Fr Es

Co 8-04483. Abstr. only. Issued also as: *Contr. Woods Hole oceanogr. Instn.* (1258).

M  
8-04485

**Suda, A., T. Koto & S. Kume** (1963)  
In 8-04466 : 1163-76

An outline of the tuna longline grounds in the Indo-Pacific (preliminary report). Fr Es

Discusses catch by spp., activities of longline vessels, productivity of the fishing ground and structure-distribution pattern of tunas.

M  
8-04486

**Shomura, R. S.** (1963)  
In 8-04466 : 1177-99

Monofilament gill net fishing for skipjack tuna in Hawaiian waters (a progress report). Fr Es

Discusses background material, results of 1961 field trials; makes recommendations.

M  
8-04487

**Seckel, G. R.** (1963)  
In 8-04466 : 1201-8

Climatic parameters and the Hawaiian skipjack fishery. Fr Es

M  
8-04488

**Abramson, N. J.** (1963)  
In 8-04466 : 1209-15

A method for computing estimates and variances of relative log fishing powers of California albacore vessels. Fr Es

Discusses estimating log relative fishing power, variance of the estimates, application.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

- M  
8-04489
- Craig, W. L.** (1963)  
*In* 8-04466 : 1217-25  
 The California albacore fishery logbook system. Fr Es  
 Discusses logbook design, editing completed logs, machine processing and tabulation, use of logbook data.
- M  
8-04490
- Johnson, J. H.** (1963)  
*In* 8-04466 : 1227-35  
 Changes in availability of albacore in the eastern Pacific ocean—1952 and 1953. Fr Es  
 Discusses albacore fisheries and migrations in the North Pacific, southern fishery—1952 and 1958—northern fishery—1952 and 1958.
- M  
8-04491
- Suda, A.** (1963)  
*In* 8-04466 : 1237-77  
 Structure of the albacore stock and fluctuation in the catch in the North Pacific areas. Fr Es  
 Discusses composition of the albacore stocks in the North Pacific areas, available stock size in the northwestern Pacific, fluctuation in the catch in the northwestern Pacific, predictability of fishing conditions; makes recommendations.
- M  
8-04492
- Nakagome, J. & S. Suzuki** (1963)  
*In* 8-04466 : 1279-97  
 Seasonal and annual variation of the hooking rate and annual variation of the catch-quantity of tuna and marlin in the tropical Atlantic Ocean. Fr Es  
 Discusses material and method, seasonal and annual variation in hooking-rate, annual variation in catch-quantity per unit of operation (100 hooks).
- M  
8-04493
- Kamimura, T. & M. Honma** (1963)  
*In* 8-04466 : 1299-328  
 Distribution of the yellowfin tuna *Neothunnus macropterus* (Temminck & Schlegel) in the tuna longline fishing grounds of the Pacific Ocean. Fr Es  
 Discusses general features of distribution, distribution in relation to environment, seasonal variation, distribution of different size-classes, some consideration on the problem of sub-populations.
- M  
8-04494
- Fitch, J. E. & P. M. Roedel** (1963)  
*In* 8-04466 : 1329-42  
 A review of the frigate mackerels (genus *Auxis*) of the world. Fr Es  
 Discusses historical resumé, distinguishing characteristics.

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- M  
8-04495
- Pinkas, L.** (1963)  
In 8-04466 : 1343-53  
Albacore scouting in the eastern North Pacific Ocean. Fr Es  
Discusses exploratory fishing, eastern North Pacific albacore surveys.
- M  
8-04496
- Mackett, D. J.** (1963)  
In 8-04466 : 1355-66  
A method of sampling the Pacific albacore (*Thunnus germon*) catch for relative age composition. Fr Es  
Discusses choice of sampling design, notation and definitions, choice of a sampling design with a fixed cost.
- M  
8-04497
- Greenhood, E. C.** (1963)  
In 8-04466 : 1367-79  
California's tuna record gathering system. Fr Es  
Discusses fish receipts, licenses, catch origins, albacore logs, fish dealers' and processors' licenses, processors' reports, tabulated reports.
- M  
8-04498
- Sprague, L. M., J. R. Holloway & L. I. Nakashima** (1963)  
In 8-04466 : 1381-93  
Studies of the erythrocyte antigens of albacore, bigeye, skipjack, and yellowfin tunas and their use in subpopulation identification. Es Fr  
Discusses materials and methods, blood-typing technique, nomenclature, serological findings, skipjack population studies.
- M  
8-04499
- Greenhood, E. C. & S. P. Davis** (1963)  
In 8-04466 : 1395-407  
Tuna landings and production 1916 to 1961. Fr Es  
Discusses historical account.
- M  
8-04500
- Shomura, R. S. & B. A. Keala** (1963)  
In 8-04466 : 1409-17  
Growth and sexual dimorphism in growth of bigeye tuna (*Thunnus obesus*). A preliminary report. Fr Es  
Discusses methods and materials.
- M  
8-04501
- Yuen, H. S. H.** (1963)  
In 8-04466 : 1419-29  
Schooling behavior within aggregations composed of yellowfin and skipjack tuna. Fr Es  
Discusses sources and treatment of data and results.

- M  
8-04502
- Waldron, K. D. & J. E. King** (1963)  
*In* 8-04466 : 1431-57  
 Food of skipjack in the central Pacific. Fr Es  
 Discusses source of materials, methods, results.
- M  
8-04503
- Radovich, J.** (1963)  
*In* 8-04466 : 1459-75  
 Effects of water temperature on the distribution of some scombrid fishes along the Pacific coast of North America. Fr Es  
 Discusses review of previous studies, additional relationships.
- M  
8-04504
- Squire, J. L., Jr.** (1963)  
*In* 8-04466 : 1477-514  
 Distribution of tuna species in the oceanic northwest Atlantic. Fr Es  
 Discusses review of knowledge to 1957, exploratory results, observed seasonal distribution of spp.
- M  
8-04505
- Lima, F. R. & J. P. Wise** (1963)  
*In* 8-04466 : 1515-21  
 A first examination of the abundance and distribution of yellowfin and albacore tuna in the western tropical Atlantic, 1957 to 1961. Fr Es  
*En* 8-04465. Discusses data, and methods of analysis, abundance, distribution.
- M  
8-04506
- Clemens, H. B. & R. A. Iselin** (1963)  
*In* 8-04466 : 1523-35  
 Food of Pacific albacore in the California fishery (1955-1961). Fr Es  
 Discusses collecting methods and areas, list of food spp.
- M  
8-04507
- Clemens, H. B.** (1963)  
*In* 8-04466 : 1537-48  
 A model of albacore migration in the North Pacific Ocean. Fr Es  
 Discusses the North Pacific fisheries, general albacore migrations, migration along east coast Japan, from the western into the eastern Pacific, along the American west coast, from the eastern into the western Pacific; discusses also larval and juvenile or age 0 albacore movements, age I, II, III, IV, V and older albacore movements.
- M  
8-04508
- De Vildoso, A. C.** (1963)  
*In* 8-04466 : 1549-56  
 Especies del genero *Sarda* en el Pacifico oriental (Species of the genus *Sarda* in the eastern Pacific). En Fr  
 Discusses validity of the spp. of the genus *Sarda* in the eastern Pacific.



# AQUATIC STOCKS

M  
8-04509

**Blackburn, M.** (1963)  
In 8-04466 : 1557-82

Distribution and abundance of tuna related to wind and ocean conditions in the Gulf of Tehuantepec, Mexico. Fr Es

Discusses topographic and climatologic features of the region, oceanographic features of the gulf of Tehuantepec, hypothetical and actual distribution and abundance of tuna in the gulf.

M  
8-04510

**Griffiths, R. C.** (1963)  
In 8-04466 : 1583-605

Studies of oceanic fronts in the mouth of the Gulf of California, an area of tuna migrations. Fr Es

Discusses oceanographic cruises and results.

M  
8-04511

**Ancieta, F.** (1963)  
In 8-04466 : 1607-19

La pesquería del bonito en el Perú (The bonito fisheries in Peru). En Fr

Discusses fishing methods, grounds and seasons, production.

M  
8-04512

**Gooding, R. M.** (1963)  
In 8-04466 : 1621-31

The olfactory organ of the skipjack *Katsuwonus pelamis*. Fr Es

Discusses materials and methods, morphology, histology, experiments to determine water flow through the olfactory chamber.

M  
8-04513

**Wilson, P. T.** (1963)  
In 8-04466 : 1633-8

The past, present and future status of the tuna resources of the trust territory of the Pacific islands. Fr Es

Discusses skipjack and bait resources, fishing vessels, programs for fisheries development.

M  
8-04514

**Squire, J. L., Jr.** (1963)  
In 8-04466 : 1639-57

Thermal relationships of tuna in the oceanic northwest Atlantic. Fr Es

Discusses oceanographic characteristics of the areas explored, water temperatures in relation to tuna distribution.

**Thomas, P. T. & M. Kumaran** (1963)

M  
8-04515

In 8-04466 : 1659-67

Food of Indian tunas. Fr Es

Discusses *Auxis thynnoides* Bleeker, *Auxis thazard* (Lacépède), *Katsuwonus pelamis* (Linnaeus), *Neothunnus macropterus* (Temminck & Schlegel), *Kishinoella tonggol* (Bleeker), *Euthynnus affinis affinis* (Cantor), *Sarda orientalis* (Temminck & Schlegel).

**Raju, G.** (1963)

M  
8-04516

In 8-04466 : 1669-82

Spawning of the oceanic skipjack *Katsuwonus pelamis* (Linnaeus) in the Laccadive Sea. Fr Es

**Ronquillo, I. A.** (1963)

M  
8-04517

In 8-04466 : 1683-752

A contribution to the biology of Philippine tunas. Fr Es

Discusses tunas caught by longline and surface swimming tunas caught by trolling.

**Jones, S. & M. Kumaran** (1963)

M  
8-04518

In 8-04466 : 1753-74

Distribution of larval tuna collected by the Carlsberg Foundation's 'Dana' expedition (1928-30) from the Indian Ocean. Fr Es

Discusses geographical, seasonal, and vertical distribution.

**Jones, S. & E. G. Silas** (1963)

M  
8-04519

In 8-04466 : 1775-96

Tuna and tuna-like fishes from the Indian seas. Fr Es

Discusses tentative key to the identification of tunas and related fishes from the Indian Ocean, double-lined mackerel, frigate mackerels genus *Auxis* Cuvier, *Auxis thazard* Lacépède, 1801, *A. thynnoides* Bleeker, 1855, *Cybiosarda elegans* Whitley, 1935, *Gymnosarda unicolor* Rüppel, *Thunnus* (T.) *thynnus orientalis* Temminck & Schlegel, *Thunnus* (T.) *alalunga* Bonnat-terre, 1788, *Thunnus* (*Parathunnus*) *obesus sibi* Temminck & Schlegel, 1844, *Kishinoella tonggol* Bleeker, 1851, *Thunnus* (*Neothunnus*) *albacares macropterus* T. & S., 1844, *Thunnus* (*Neothunnus*?) *itosibi* Jordan & Evermann, 1926, *Allothunnus fallai* Serventy, 1948, *Euthynnus affinis affinis* Cantor, 1850, *Katsuwonus pelamis* Linnaeus, 1758.

**Marchal, E.** (1963)

M  
8-04520

In 8-04466 : 1797-811

Description des stades post-larvaires et juvéniles de *Neothunnus albacora* (Lowe) de l'Atlantique tropico-oriental (Description of post-larval and juvenile stages of *Neothunnus albacora* (Lowe) of the eastern tropical Atlantic). En Es

Discusses periods and sites of capture, hydrological conditions, biometry, development of post-larval and juvenile stages.

# AQUATIC STOCKS

- Rodriguez-Roda, J. (1963)** M  
8-04521  
*In* 8-04466 : 1813-22

Resultados del programa de marcado de atún en aguas españolas (Results of the tuna tagging plan in Spanish waters). En Fr

Discusses material and methods, tagging and recaptures, migration.

- Rodriguez-Roda, J. (1963)** M  
8-04522  
*In* 8-04466 : 1823-34

Talla, peso, edad y crecimiento del atún del Golfo de Cadiz, España (Length, weight, age and growth of tuna from Golfo de Cadiz, Spain). En Fr

Discusses material and methods, length, weight, age and growth.

- Laevastu, T. & H. Rosa, Jr. (1963)** M  
8-04523  
*In* 8-04466 : 1835-51

Distribution and relative abundance of tunas in relation to their environment. Fr Es

Discusses temperature preference as related to surface water temperature, depth preference, relations to thermocline, diurnal migrations, seasonal migrations as affected by environment, relation to transparency of water, to abundance of food, to coasts and submarine topography, to meteorological factors.

- Duchâteau, C. H., M. Florkin & Ch. Jeuniaux (1959)** MF  
8-04524  
*Arch. int. Physiol.*, 67 : 489-50

Amino acid components of tissues of crustaceans. 1. Amino acid components of the muscles of *Carcinus maenas* from time of passing from sea water to brackish water during molt

WFA 13 (3) : 47. Crustaceans—shrimps—chemical composition.

- Morović, D. (1961)** MF  
8-04525  
*Proc. gen. Fish. Coun. Medit.*, 6 : 151-3

Distribution géographique du genre *Mugil* sur la côte orientale de l'Adriatique (Geographical distribution of the genus *Mugil* on the eastern Adriatic coast). En

CR 61-00422.

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**Cooley, R. A.** (1962)  
Thesis, Univ. of Michigan, 359 p.

MF  
8-04526

Decline of the Alaska salmon. A case study in resource conservation policy

DA 23 (2) : 686-7. Part 1 analyzes environmental setting to determine major factors which conditioned structure of industry and pattern of exploitation that resulted. Method used is primarily economic and statistical analysis. Part 2 traces historical development of federal conservation policies emphasizing major issues and conflicts that evolved, attitudes and activities of various interest groups and public policies that resulted, based on examination of written record as found in congressional hearings, committee reports, Congressional Record, official reports of government agencies, enacted laws and policy statements, newspapers and trade journals, and the writings, addresses, letters and reports of persons and organizations involved in the policy-formulating process supplemented by correspondence and interview with persons in government and business having knowledge of particular aspects of the study. Part 3 presents conclusions and evaluates their implications in terms of probable future of the resource under state government administration.

**Laurie, A.** (1962)  
*New. Scient.*, 16 (309) : 167  
Physiology of deep diving

MF  
8-04527

Re 8-03479. Contains reference to the blood gases of Antarctic blue and fin whales, where it seems likely that nitrogen fixation was achieved by means of an enzyme in the blood plasma. Questions whether such an enzyme could be isolated and injected into divers as an antidote to the bends.

**Knoepffler, L.-P.** (1961)  
*Vie et Milieu*, 12 (3) : 517-28

MF  
8-04528

Contribution à l'étude des amphibiens et des reptiles de Provence. 2. Généralités (2<sup>e</sup> note) 1. (Contribution to the study of amphibians and reptiles of Provence. 2. Generalities (2nd note) 1.)

Co 62-02168. Origin of fauna, departmental herpetological distribution of fauna, key to the identification of species, vernacular names.

**Théodoridès, J. & L. Laubier** (1962)  
*Vie et Milieu*, 13 (2) : 323-6

MF  
8-04529

*Selenidium mercierellae* n. sp. (Archigregarina Selenidiidae) grégarine parasite du serpulien d'eau saumâtre *Mercierella enigmatica* Fauvel. (Note préliminaire) (*Selenidium mercierellae* n. sp. (Archigregarina Selenidiidae) a gregarine parasite of a brackish water serpulid, *Mercierella enigmatica* Fauvel. (Preliminary note) )

Description of trophozoites and syzygies of the sp.



- Chugunova, N. I.** (1962) MF 8-04530  
*Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1118-20

The adaptive significance of structural changes in fish scales by means of the formation of annual and supplementary rings and spawning marks

En 62-05021. Special references to *Caspialosa*, *Cyprinus carpio* in Volga delta experimental farm, and salmon. Observations and physiological interpretation of 'depletion rings', 'condition rings', 'resorption scales', and spawning marks.

- Skrjabin, K. I. et al.** (Birron, A. & Z. S. Cole Transl.) (1961) MF 8-04531  
 Jerusalem, Israel Program for Scientific Translations, 890 p.

Key to parasitic nematodes—Vol. 3: Strongylata

Keys with figures, systematic descriptions and a general review. The suborder includes some bird and seal parasites. En 1952, Skrjabin, K. I. et al. Available from Office of Technical Services, Department of Commerce, Washington, D.C.

- Ridgway, G. J., G. W. Klontz & C. Matsumoto** (1962) MF 8-04532  
*Bull. int. N. Pacif. Fish. Comm.*, (8) : 1-13

Intraspecific differences in serum antigens of red salmon demonstrated by immunochemical methods

- Fukuhara, F. M. et al.** (1962) MF 8-04533  
*Bull. int. N. Pacif. Fish. Comm.*, (8) : 15-109

Continental origin of red salmon as determined from morphological characters

- Sommani, E.** (1961) F 8-04534  
*Proc. gen. Fish. Coun. Medit.*, 6 : 63-70

Le *Salmo marmoratus* Cuv. dans l'Italie du Nord (*Salmo marmoratus* Cuv. in northern Italy). En

CR 61-00411.

- Maldura, C.** (1961) F 8-04535  
*Proc. gen. Fish. Coun. Medit.*, 6 : 203-6

Recherches préliminaires sur l'action de l'alkyl-aryl-sulfonate sur la truite arc-en-ciel (*Salmo irideus*) (Preliminary research on the action of sulfonate-alkyl-aryl on *Salmo irideus*). En

CR 61-00431.

- Sarig, S.** (1961) F 8-04536  
*Proc. gen. Fish. Coun. Medit.*, 6 : 207-12

Carp diseases, their prevention and treatment. Fr

CR 61-00432.

**Volk, S. & D. Vesel** (1961)

F  
8-04537

*Proc. gen. Fish. Coun. Medit.*, 6 : 325-7

La truite marbrée (*Salmo marmoratus* Cuv.) et sa reproduction artificielle (The marble trout *Salmo marmoratus* Cuv., and its artificial reproduction). En

CR 61-00455.

**Aksiray, F.** (1961)

F  
8-04538

*Proc. gen. Fish. Coun. Medit.*, 6 : 335-43

About sudak (*Lucioperca sandra* Cuv. et Val.) introduced into some of the lakes of Turkey. Fr

CR 61-00457.

**Lambou, V. W.** (1961)

F  
8-04539

Atlanta, Georgia, mimeo : 50 p.

Determination of fishing pressure from fishermen or party counts with a discussion of sampling problems

A detailed review of the subject with specific reference to reservoirs.

**Kramer, R. H.** (1962)

F  
8-04540

Thesis, Univ. of Minnesota, 141 p.

The early life history of the largemouth bass, *Micropterus salmoides* (Lacépède), with special reference to factors influencing year-class strength

DA 23 (2) : 757. Study conducted from 1955 through 1958 at lake George, Anoka County, Minnesota, and adjoining sloughs used by largemouth bass for spawning. Approach to problem was to obtain indices of abundance at various times during the first year of life and to measure ecological factors as they were related to survival of eggs, fry, and fingerlings.

**Smol'yanov, I. I. & E. V. Raikova** (1962)

MF  
8-04541

*Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1049-52

The occurrence of sexually mature *Polypodium hydriforme* Ussov (Coelenterata) on sturgeon juveniles

En 62-05035. Life cycle of parasite of sturgeon spawn, not yet fully elucidated. Captures of free-living polyps have been made in the field. During 1956, free-living stages were found between 21 Jul. and 27 Aug. in the course of examining sturgeon larvae.

- F
- Gun'ko, A. F., L. T. Karpus' & P. A. Samsonenko** (1962) 8-01542  
*Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1093-4  
 Incubating sturgeon at a controlled temperature

*En* 62-05022. Artificial control of optimal temperature of incubation in breeding stations may increase output, reduce expenditure on spawn, and enhance viability of larvae. Must first determine effect on spawn of its transfer into incubation apparatus having a temperature different from that of body temperature of parents, and find effect on larvae of transferring them to water at a temperature different from that in the incubation apparatus. In 1960, on Rogozhkinskii fish farm on the Don, by use of hypophysial injections obtained sturgeon spawn at temperatures close to spawning temperature.

- F
- Zaika, V. E.** (1962) 8-04543  
*Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1103-5  
 The question of endemicity among the parasites of fish in lake Baikal

*En* 62-03986. Spp. of *Sphaerospora* (Myxosporidia), *Dactylogyrus* (Monogenoidea) on *Phoxinus*, *Cobitis*, *Leuciscus*, *Brachymystax*, *Coregonus*. Author discovered more than 30 spp. not previously represented in the fauna of Baikal. Two new spp. and one subspecies having, apparently, different zoogeographical positions are given.

- F
- Anders, F. et al.** (1961) 8-04544  
*Experientia*, 17 : 549-51  
 (The genetic conditions for tumour production in viviparous tooth carp—Poeciliidae—and the free amino acid contents). *De*

IABS 26 (2) 4200.  $F_{1n}$  and F-R-hybrids of *Platypleurodon maculatus* and *Xiphophorus helleri* producing melanomase spontaneously, contain more free amino acids than the initial sp.

- F
- Pequin, L.** (1962) 8-04545  
*C.R. Acad. Sci., Paris.*, 255 (15) : 1795-7  
 Les teneurs en azote ammoniacal du sang chez la carpe—*Cyprinus carpio* L. (The degree of ammonised nitrogen in the blood of carp—*Cyprinus carpio* L.)

Preliminary note on experiments to determine the part played by liver and gills in the elimination of ammonia.

- F
- Dudel, J.** (1962) 8-04546  
*Nature, Lond.*, 193 : 587-8  
 Effect of inhibition of the presynaptic nerve terminal in the neuromuscular junction of the crayfish

IABS 26 (3) 6646. *Astacus fluviatilis*.

**Altukhov, Iu. P.** (1961)

MF

8-04547

*Tsitologiya*, 3 : 598-600

(The influence of sex and age on the thermostability and the degree of serological affinity of muscle proteins in some fishes). *Ru*

IABS 26 (3) 6675. Investigated on two age groups of the northern shoal of mackerel and on the male and female of *Atherina hepsetus* (L).

F

**Gonzalez, R. C., N. Longo & M. E. Bitterman** (1961)

8-04548

*J. comp. physiol. Psychol.*, 54 : 452-6

Classical conditioning in the fish; exploratory studies of partial reinforcement

IABS 26 (1) 2078. Goldfish conditioned to respond to light by pairing it with shock. Fish which always experienced shock 4.5 sec after light onset developed a higher response level than those with a longer delay before the shock, or shock on only half their trials.

F

**Emerit, M. & T. Mohsen** (1961)

8-04549

*C.R. Soc. Biol., Paris*, 155 : 1540-3

(Resistance and adaption of *Lebistes reticulatus* to increased salinity. A behavioural study). *Fr*

IABS 26 (1) 2086. Chose freshwater in preference to seawater. After adaptation to seawater, freshwater was again chosen. A marked change in salinity of inflowing water resulted in inclination of the body axis. Aeration increased the survival time in seawater.

F

**Richard, B.** (1961)

8-04550

*Vie et Milieu*, 12 (3) : 507-15

Le déblaiement chez le castor: rapport entre le déblaiement et la réalisation des canaux et des barrages (Excavations among the beavers: relation between the excavations and the construction of canals and dams)

F

**Wurtz, A.** (1961)

8-04551

*Bull. franç. Piscic.*, 34 (202) : 5-12

Sur le traitement de la maladie infectieuse des carpes d'élevage en étangs (On the treatment of the infectious carp disease in ponds)

Description of disease, treatment with antibiotics and other methods.

F

**Schäperclaus, P. W.** (1961)

8-04552

*Bull. franç. Piscic.*, 34 (202) : 13-23

Les maladies des poissons (Fish diseases)

Internal and external treatments.



# AQUATIC STOCKS

- F  
8-04553
- Sánchez, J.** (1962)  
*Pesca, Lima* (Yearb.), 1961-1962 : 127-33  
 El paiche, gigante del Amazonas (The paiche, giant of the Amazon River)

Describes the life history, ecology and commercial use of the *Arapaima gigans*.

- F  
8-04554
- Romero, J. S.** (1962)  
*Pesca, Lima* (Yearb.), 1961-1962 : 111-8  
 Peces peligrosos de la Amazonia peruana (Dangerous fishes in the Peruvian Amazon)

Notes on *Vandellia plazaii*, species of Serrasalminae, *Electrophorus electricus* and *Potamotrygon* sp.

- F  
8-04555
- Nümann, W.** (1961)  
*Bull. franç. Piscic.*, 33 (201) : 133-6  
 La transformation de truites de rivière marquées en truites de lac dans le lac de Constance (The conversion of marked stream trout into lake trout in the Lake of Constance)

- F  
8-04556
- Gery, J. R.** (1961)  
*Bull. aquat. Biol.*, 2 (22) : 121-7  
 Notes on the ichthyology of Surinam and other Guianas. 7. *Hyphessobrycon georgetti* n. sp., a dwarf sp. from southern Surinam

Diagnosis and description.

- F  
8-04557
- Gery, J.** (1961)  
*Bull. aquat. Biol.*, 2 (19) : 93-112  
 Contributions à l'étude des poissons characoïdes. 13. Structures et évolution des Anostominae (Contributions to the studies of characoid fishes. 13. Structure and evolution of Anostominae)

- F  
8-04558
- Taliev, D. N.** (1961)  
 PL-480 Int., 24 p.  
 Serological analysis of the races of the baikal omul (*Coregonus autumnalis migratorius* (Georgi))

En 1941, Taliev, D. N. Descriptors: Serum, analysis, genetics, fishes, antibodies, antigens, classification, salmon. Available from Office of Technical Services, Department of Commerce, Washington, D.C.

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**Taliev, D. N.** (1961)

F  
8-04559

PL-480 Int., 44 p.

Serological analysis of wild and domesticated forms of carp (*Cyprinus carpio* L.)

En 1946, Taliev, D. N. Descriptors: Fishes, carp, blood chemistry, serum, analysis, antibodies, genetics, biochemical genetics, growth. Available from Office of Technical Services, Department of Commerce, Washington, D.C.

**Oetomo, S.** (1959)

F  
8-04560

*Berita Perik.*, 11 (4-5-6) : 56-61

Ikan guramy (On *Osphronemus goramy* Lac.). *Bah Ind*

Only in Borneo the goramy is found in open waters. In eastern Java it is cultivated in ponds, in central and eastern Java also on paddy fields, both as a second crop and among the rice plants. Stocking schedules and calculations of costs and profit are given.

**Sardjito, M.** (1959)

F  
8-04561

*Berita Perik.*, 11 (4-5-6) : 117-9

Membiakkan ikan instalasi penjaringan air minum setjara perlahan-lahan di Makasar (Fish cultivation in the drinking water filters at Makasar). *Bah Ind*

In the sandfilters common carp and *Puntius javanicus* are cultivated. Eating algae, these carps prolong the lifetime of the filters, without increasing the number of bacteria of the concentration of dissolved organic substances, although the fish dig holes in the sand and deposit their excreta.

**Yuan, H. K., Liu, H. H. & Hsu, H. T.** (1959)

F  
8-04562

K'un Ch'ung Hsüeh Pao (Chinese People's Republic), 9 : 2 p.

(A survey of mosquitoes in En-shih special district, Pu-ch'i Hsien, Yanghsin Hsien, and Wuhan city of Hupeh province). *Ch*

Descriptors: Mosquitoes, disease carriers, classification, distribution, climatic factors, identification.

**Yuan, H. K., Liu, H. H. & Hsu, H. T.** (1961)

F  
8-04563

JPRS : 10634, 9 p.

A survey of mosquitoes in En-shih special district, Pu-ch'i Hsien, Yanghsin Hsien, and Wuhan city of Hupeh province

En 8-04562. Available from Office of Technical Services, Department of Commerce, Washington, D.C.

**Sommani, E.** (1962)

F  
8-04564

*Boll. Pesca Piscic. Idrobiol.*, 15 (2) : 190-3

Interessante caso di mostruosità in esemplare di tinca (*Tinca tinca* L.). (Interesting case of monstrosity in a specimen of tench: *Tinca tinca* L.). *It*

- Zanandrea, S. I. G.** (1959) F  
8-04565  
*Boll. Zool.*, 26 : 545-54

Recenti ricerche sulle forme appaiate di lamprede dell'Italia e del Danubio (Researches on the paired forms of lampreys in Italy and in the Danube). *It En*

The paired lampreys live in the same basins, both in Italy and in the Danube, but the parasitic form inhabit the lower regions of the basins whereas the non-parasitic dwell in the upper.

- Cianficconi, F.** (1959) F  
8-04566  
*Boll. Zool.*, 26 : 607-13

Il regime dietetico della basca del Trasimeno (*Rutilus rubilio* Bp. v. *rubella*—*Trasimenicus*) (Dietary habits of *Rutilus rubilio* Bp. v. *rubella* *Trasimenicus* in Trasimeno Lake). *It En*

Study of the intestinal contents.

- Hastings, C. E. & F. B. Cross** (1962)\* F  
8-04567  
 Kansas Univ. Museum of Natural History, 21 p.

Farm ponds in Douglas County, Kansas, and their use in fish-production

- Aisa, E.** (1959) F  
8-04568  
*Boll. Zool.*, 26 : 601-6

I tubercoli nuziali in *Rutilus rubilio* Bp. var. *rubella* (*Trasimenicus*) Bp. del Lago Trasimeno—Osservazioni macroscopiche ed istologiche (Macroscopical and histological observations performed on horny nuptial tubercles of *Rutilus rubilio* v. *rubella* Bp. of Trasimeno Lake). *It En*

Confirms the opinion of some previous workers according to whom these fishes represent a separated variety.

- Meier, A. H.** (1962) FG  
8-04569  
 Thesis, Univ. of Missouri, 86 p.

The effects of pitocin and pitressin on water and sodium movements in the euryhaline killifish, *Fundulus kansae*

DA 23 (2) : 676. In view of findings by Rasquin & Stoll (1955 & 1957) and by Arvy, Fontaine & Gabe (1954, 1955 & 1959) in which osmotic adjustments in teleosts were reflected by neurosecretory changes, an attempt was made to demonstrate an osmotic response to pitressin and pitocin injections. Hormone effects on water movements were tested by measuring the weight changes of renal papilla ligated female *F. kansae* held in tap water and hypertonic salt solutions.

FG

8-04570

**Balakhnin, I. A. (1962)***Dokl. Akad. Nauk SSSR (En Transl. biol. Sci. Sec.)*, 141 (1-6) : 1063-4

A method of determining intra-species differences in trout blood

*En* 62-03905. Started with crossed reactions between trout sera and erythrocytes. Negative results were obtained. Tested ability of pig-blood to agglutinate trout erythrocytes, and found that it did so strongly in all forms tested. Method proposed is suitable for investigations under field conditions.

## MISCELLANEOUS AND AUXILIARIES

M

8-04571

**Miles, S. (1962)**

London, Staples Press, 328 p.

Underwater medicine

Deals with various forms of diving, as well as the submarine; there are chapters on equipment, training and safety, in addition to the medical and physiological aspects. Nitrogen narcosis, oxygen poisoning and decompression sickness are treated in detail, and there is a chapter on drowning and its treatment.

M

8-04572

**South Africa. Republic. Laws, Statutes, etc. (1962)***Govt Gaz. S. Afr.*, (169) : 1-6

Government notice No. R. 168. General sea-shore regulations made in terms of section 10 of the sea-shore act, 1935 (Act No. 21 of 1935).—2 February 1962. *En Af*

Prohibits *inter alia*, in certain areas of the sea-shore, to fish or angle, or leave any bait, fish-hook or refuse thereon.

M

8-04573

**Spain. Laws, Statutes, etc. (1959)***Bol. ofic. Estado. Madr.*, (181) : 10309-35

Orden de 16 de julio de 1959 por la que se aprueba la reglamentación nacional de trabajo en la industria de la pesca del bacalao (Order approving national labour regulations for the cod-fishing industry.—16 July 1959)

Very detailed regulations respecting organization of work, classification of personnel, vocational training, etc.

M

8-04574

**Spain. Laws, Statutes, etc. (1961)***Bol. ofic. Estado, Madr.*, (303) : 17866

Resolución de la dirección general de ordenación del trabajo por la que se da cumplimiento al artículo 121 de la reglamentación nacional de trabajo en la pesca de arrastre sobre gastos de explotación.—4 de diciembre de 1961 (Resolution giving effect to article 121 of the national labour regulations for trawl fishing with respect to operating costs.—4 December 1961)

Forbids unjustified increases in the operating costs of fishing vessels.



# MISCELLANEOUS AND AUXILIARIES

M  
8-04575

**Spain. Laws, Statutes, etc. (1961)**  
*Bol. ofic. Estado, Madr.*, (311) : 18342-4

Ley 144/1961, de 23 de diciembre, sobre reorganización de las enseñanzas náuticas y de pesca (Act No. 144/1961 relative to the reorganization of marine and fisheries instruction.—23 December 1961)

Extensive provisions.

M  
8-04576

**Spain. Laws, Statutes, etc. (1961)**  
*Bol. ofic. Estado, Madr.*, (311) : 18345-7

Ley 147/1961, de 23 de diciembre, sobre renovación y protección de la flota pesquera (Act No. 147/1961 relative to the rehabilitation and protection of the fishing fleet.—23 December 1961)

Applies a plan for the renewal of the fishing fleet and its increase and provides for certain tax exemptions in that respect.

M  
8-04577

**Spain. Laws, Statutes, etc. (1961)**  
*Bol. ofic. Estado, Madr.*, (311) : 18358-9

Ley 156/1961, de 23 de diciembre, sobre dotaciones del profesorado de las escuelas de náutica y de pesca (Act No. 156 relative to the provision of teaching staffs for marine and fisheries schools.—23 December 1961)

For corrections see: *Bol. ofic. Estado, Madr.*, (29) : 1643. 1962.

M  
8-04578

**Spain. Laws, Statutes, etc. (1961)**  
*Bol. ofic. Estado, Madr.*, (13) : 647-8

Orden de 28 de diciembre de 1961 sobre salario inicial base en la reglamentación nacional de trabajo en las factorías bacaladeras (Order relative to the basic initial salary under the national labour regulations for cod processing plants.—28 December 1961)

M  
8-04579

**Spain. Laws, Statutes, etc. (1961)**  
*Bol. ofic. Estado, Madr.*, (8) : 386

Orden de 28 de diciembre de 1961 por la que se da nueva redacción al artículo 125 de la reglamentación nacional de trabajo en la industria de la pesca del bacalao (Order redrafting article 125 of the national labour regulations for the cod fishing industry.—28 December 1961)

Ci 8-04573. Provides for a 6 per cent increase in the basic wage.

M  
8-04580

**Spain. Laws, Statutes, etc. (1961)**  
*Bol. ofic. Estado, Madr.*, (11) : 551

Orden de 28 de diciembre de 1961 sobre salario inicial base en la reglamentación nacional de trabajo en las industrias de conservas y salazones de pescado (Order on the initial basic wage in the national labour regulations for the fish preserving and salting industries.—28 December 1961)

M

**Spain. Laws, Statutes, etc. (1962)**

8-04581

*Bol. ofic. Estado, Madr.*, (17) : 873

Decreto 7/1962, de 18 de enero de 1962, por el que se señala la cifra total de créditos para el desarrollo del plan de renovación y aumento de la flota pesquera y se dan normas para su concesión (Decree No. 7/1962 establishing the total amount of finance available for carrying out the plan for the rehabilitation and increase of the fishing fleet, and containing rules governing the grant of such finance.—18 January 1962)

Four billion pesetas from 1962 to 1971.

M

**Spain. Laws, Statutes, etc. (1962)**

8-04582

*Bol. ofic. Estado, Madr.*, (33) : 1860

Resolución de la dirección de ordenación del trabajo por la que se señala, con carácter provisional, la plantilla mínima en las embarcaciones dedicadas a la pesca de arrastre.—18 de enero de 1962 (Resolution of the general directorate for the regulations of labour laying down provisionally the minimum crews on vessels engaging in trawl fishing.—18 January 1962)

Crew numbers shall be in accordance with the provisions of article 15 of the national labour regulations for the deep-sea fishing industry of 28 Oct. 1946.

M

**Spain. Laws, Statutes, etc. (1962)**

8-04583

*Bol. ofic. Estado, Madr.*, (19) : 967-9

Orden de 19 de enero de 1962 por la que se dictan normas provisionales para la aplicación de la ley sobre renovación y protección de la flota pesquera de 23 de diciembre de 1961 (B.O.E. No. 311) (Order laying down provisional rules for the application of the act on the rehabilitation and protection of the fishing fleet of 23 December 1961.—19 January 1962)

Ci 8-04576. Lays down procedure to follow in applying for financial assistance.

M

**Syrian Arab Republic. Laws, Statutes, etc. (1961)**

8-04584

*Rec. Lois Répub. arabe syr.* (1) : 17-25

Décret législatif N° 154 du 3 décembre 1961, fixant le cadre et déterminant la mission de la direction générale des ports dans la République arabe syrienne (Legislative decree No. 154, establishing and prescribing the responsibilities of the general directorate for harbours in the Syrian Arab Republic.—3 December 1961)

Responsibilities include the application of the acts and orders and regulations relative to fisheries.

M

**Tunisia. Laws, Statutes, etc. (1961)**

8-04585

*J. off. tunis.*, (58) : 1779

Arrêté du 27 décembre 1961 prohibant l'importation de certains produits de la mer et de leurs conserves (Order prohibiting the import of certain sea products and preserves thereof.—27 December 1961)

# MISCELLANEOUS AND AUXILIARIES

M  
8-04586

**U.K. Treaties, etc. (1960)**  
*Treaty Ser. U.K.*, (25) : 11 p.  
 Fishery agreement between the United Kingdom and the Kingdom of Norway.—17 November 1960

Up to 31 Oct. 1970, fishing vessels registered in the United Kingdom may continue to fish in the zone between the limits of 6 and 12 miles from the base line from which the territorial sea of Norway is measured.

M  
8-04587

**U.K. Laws, Statutes, etc. (1961)**  
*Statut. Instrum. U.K.*, (1443) : 4 p.  
 The herring subsidy (United Kingdom) scheme, 1961, pursuant to the white fish and herring industries act, 1957 (a).—29 June 1961

Scheme for the payment of grants to the owners or charterers of fishing vessels not exceeding 140 feet in length engaged in catching herring.

M  
8-04588

**U.K. Laws, Statutes, etc. (1961)**  
*Treaty Ser. U.K.*, (49) : 10 p.  
 Schedule to the international whaling convention, 1946.—July 1961

Revised to include the amendments that came into operation after the eleventh and twelfth meetings of the International Whaling Commission in London, 1959-1960.

M  
8-04589

**U.K. Laws, Statutes, etc. (1961)**  
*Statut. Instrum. U.K.*, (2244) : 2 p.  
 The white fish and herring industries (grants for fishing vessels, engines, and conversions) (amendment) scheme, 1961, made pursuant to the white fish and herring industries act, 1953, as amended.—1 November 1961

The White Fish Authority may reduce or waive a repayment, in the event of a breach of any undertaking or condition, by a person who has received a grant.

M  
8-04590

**U.K. Laws, Statutes, etc. (1961)**  
*Statut. Instrum. U.K.*, (2213) : 3 p.  
 The north-eastern sea fisheries district (variation of district) order, 1961.—17 November 1961

The order adjusts the boundaries of the north-eastern sea fisheries district and provides for the consequential exclusion of the borough council of Middlesbrough from the councils constituting the north-eastern sea fisheries committee.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

**U.K. Laws, Statutes, etc. (1961)**

M  
8-04591

*Statut. Instrum. U.K.*, (2417) : 2 p.

The white fish and herring subsidies (aggregate amount of grants) (No. 2) order, 1961, made pursuant to the white fish and herring industries acts, 1957-1961—29 November 1961

The aggregate amount of grants is increased to twenty-five million two hundred and fifty thousand pounds.

**U.K. Laws, Statutes, etc. (1961)**

M  
8-04592

*Statut. Instrum. U.K.*, (2448) : 4 p.

The white fish subsidy (United Kingdom) (Amendment) scheme, 1961, made pursuant to the white fish and herring industries acts, 1953-1961.—29 November 1961

Increases the grants payable for vessels fishing the middle water grounds in the vicinity of the Faroes.

**U.S. Laws, Statutes, etc. (1962)**

M  
8-04593

*Fed. Reg. U.S.*, 27 (17) : 740-1

Code of federal regulations, title 21—chap. 1—subchap. B: Food and food products—part 37: Fish, definitions and standards of identity; Standards of fill of container. Fish flour; Identity.—22 January 1962

**Anon. (1962)**

M  
8-04594

*Industr. pesq., Vigo*, 36 (847) : 274

Nuevo reglamento de la pesca de arrastre (New regulations of the trawl fishery)

Text of new law establishing regulation.

**Callame, B. (1960)**

M  
8-04595

*Trav. Cent. Rech. Étud. océanogr.*, 3 (3) : 19-26

Caractères physico-chimiques et biologiques de la station de corrosion de la Rochelle (Physico-chemical and biological characteristics of the corrosion station of La Rochelle)

Description of the location and hydrology of the station, characteristics and meteorological conditions at La Rochelle, notes on fixation of sessile invertebrates and algae.

**Hache, A. (1960)**

M  
8-04596

*Trav. Cent. Rech. Étud. océanogr.*, 3 (3) : 29-40

La corrosion de l'acier en eau de mer (Corrosion of steel in sea water)

Results of experiments carried out during five years in the laboratory of Saint-Germain-en-Laye, and experimental station of La Rochelle and Biarritz.



**Romanovsky, V.** (1960) M  
8-04597  
*Trav. Cent. Rech. Étud. océanogr.*, 3 (3) : 53-61

Essai d'étalonnage des stations françaises de corrosion marine (Attempt to standardise the French stations concerned with marine corrosion)

Attempt to standardize methods and activities.

**IOF** (1962) M  
8-04598  
*Sea Frontiers*, 8 (3) : 130-190

This issue contains the following semipopular articles: Let's close the gap; Living sonar; Urchin killer; The dolphin fish; FLIP ship for Scripps; Neglected ocean; Science of the sea in books.

**Carlisle, J. G., Jr.** (1962) M  
8-04599  
*Sea Frontiers*, 8 (2) : 68-75  
Housing scheme for fishes

Results of recent experiments on ocean habitat development, especially off California.

**Abbamonte, G.** (1962) M  
8-04600  
*Riv. tec.-giur. Pesca*, 3 (1) : 28-42

Le leggi penali siciliane e la libertà del commercio ittico all'esame della corte costituzionale (The Sicilian penal laws and the freedom of fish-trade examined by the constitutional Court). *It*

**Rohlf, G.** (1962) M  
8-04601  
*Boll. Atlante ling. Medit.*, (2-3) : 7-18

Terminologia marinaresca nel Salento. 2. Nomi di pesci e di molluschi (Note lessicali ed etimologiche) (Marine terminology in Salento. 2. Names of fish and shellfish—Lexical and etymological notes). *It*

List of dialectal names with their Italian explication.

**Francescato, G.** (1962) M  
8-04602  
*Boll. Atlante ling. Medit.*, (2-3) : 19-24

Un esperimento sull'assenza di terminologia marittima in friulano (Research on the absence of maritime terminology in Friulan). *It*

**Petkanov, I.** (1962) M  
8-04603  
*Boll. Atlante ling. Medit.*, (2-3) : 25-42

Esperienze sulla costa bulgara del Mar Nero col questionario dell'ALM (Experiences on the Bulgarian coast of the Black Sea with the ALM questionnaire). *It*

List of maritime terms collected in the towns of Varna and Sozopol.

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- M  
8-04604
- Sala, M.** (1962)  
*Boll. Atlante ling. Medit.*, (2-3) : 43-54  
 Esperienze a Costanza col questionario dell'ALM (Experiences at Constanța with the ALM questionnaire). *It*  
 Origin of the Rumanian maritime terminology.
- M  
8-04605
- Caferoglu, A.** (1962)  
*Boll. Atlante ling. Medit.*, (2-3) : 55-60  
 Preliminary outline on the ethnocentric description of Turkey by connection with the publication of the ALM  
 Different civilization and language regions in the districts of Turkey; Turkish fish names and their origin.
- M  
8-04606
- Alessio, G.** (1962)  
*Boll. Atlante ling. Medit.*, (2-3) : 139-48  
 Note etimologiche sulla terminologia marinaresca (Etymological notes on maritime terminology). *It*  
 Discusses some Italian dialect fish names and nautical terms.
- M  
8-04607
- Cortelazzo, M.** (1962)  
*Boll. Atlante ling. Medit.*, (2-3) : 165-8  
 Voci nautiche turche di origine italiana e greca in antichi lessici bilingui (Turkish nautical terms of Italian and Greek origin in ancient bilingual lexicons). *It*
- M  
8-04608
- Altbauer, M.** (1962)  
*Boll. Atlante ling. Medit.*, (2-3) : 169-74  
 Della lingua dei pescatori israeliani (On the language of Israel's fishermen). *It*
- M  
8-04609
- Sakhno, P. & I. Fyodorov** (1962)  
*Sea Frontiers*, 8 (2) : 117-20  
 Soviet oil fields in the sea  
 Article on the Caspian oil fields.
- M  
8-04610
- Allen, E. W.** (1962)  
*Sea Frontiers*, 8 (2) : 109-15  
 Fighting for fish  
 Article on international fisheries problems and legislation, with special reference to North Pacific.

- Spain. Laws, Statutes, etc. (1961)** MF  
*Bol. ofic. Estado, Madr.*, (304) : 17910-5 8-04611  
 Decreto 2559/1961, de 30 de noviembre, por el que se aprueba la nueva reglamentación para la explotación de viveros de cultivo, situados en la zona marítima (Decree 2559/1961 approving the new regulations for fish culture activities in the coastal area.—30 November 1961)

Extensive legislation designed to improve the quality of fish, particularly of shellfish.

- Spain. Laws, Statutes, etc. (1961)** MF  
*Bol. ofic. Estado, Madr.*, (308) : 18093-4 8-04612  
 Orden de 13 de diciembre de 1961 por la que se autoriza el empleo del instrumento denominado "horquilla" para la captura de la navaja o longueirón (Order authorizing the use of the fishing equipment known as "fork" for the purpose of catching razor-shells or razor-clams.—13 December 1961)

Prescribes conditions under which such equipment may be used, with a view to protecting shellfish and oyster beds.

- Spain. Laws, Statutes, etc. (1962)** MF  
*Bol. ofic. Estado, Madr.*, (49) : 2781 8-04613  
 Resolución de la dirección general de montes, caza y pesca fluvial disponiendo períodos hábiles para la pesca del salmón y de la trucha.—26 de enero de 1962 (Resolution of the general directorate for mountains, hunting and river fisheries laying down salmon and trout fishing seasons.—26 January 1962)

The salmon season runs from 4 Mar. to 18 Jun. and the trout season from 4 Mar. to 15 Aug. 1962.

- Sweden. Laws, Statutes, etc. (1961)** MF  
*Svensk FörfSaml.*, (519-520) : 1309 8-04614  
 Kungl. maj:ts kungörelse Nr 519 om undantag från förbudet mot ljusterfiske.—10 november 1961 (Royal order No. 519, providing for exceptions to the prohibition of harpoon fishing.—10 November 1961)

In prescribed waters.

- Switzerland. Laws, Statutes, etc. (1961)** MF  
*Rec. Lois féd., Berne*, (2) : 7-9 8-04615  
 Arrêté fédéral concernant la perception d'une taxe sur les carburants pour moteurs destinés à financer à titre complémentaire les routes nationales.—29 septembre 1961 (Federal order relative to the collection of a tax on motor fuels, to provide supplementary finance for the national road system.—29 September 1961)

Such tax shall be refunded if fuels are used for agriculture, forestry or fishery purposes.

- Switzerland. Laws, Statutes, etc. (1962)** MF  
8-04616  
*Rec. Lois. féd., Berne, (2) : 11-8*

Arrêté du conseil fédéral réglant l'exécution de l'arrêté fédéral qui concerne la perception d'une taxe sur les carburants pour moteurs destinés à financer à titre complémentaire les routes nationales.—5 janvier 1962 (Order of the federal council governing execution of the federal order relative to the collection of a tax on motor fuels, to provide supplementary finance for the national road system.—5 January 1962)

Co 8-04615. Prescribes in detail in which cases the tax shall be refunded, i.e. if fuels are used for agricultural, forestry or fishery purposes.

- U.K. Laws, Statutes, etc. (1961)** MF  
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*Statut. Instrum. U.K., (1931) : 6 p.*

The lead in food regulations, 1961, pursuant to the food and drugs act, 1955 (a).—9 October 1961

Restrict the amount of lead which may be present in food (including fish products) intended for sale for human consumption.

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8-04618  
*Statut. Instrum. U.K., (260) : 2 p.*

The Cumberland River Board (fisheries) order, 1961, made under the salmon and freshwater fisheries act, 1923 and the river boards act, 1948.—15 December 1961

Enables the Cumberland River Board to fix the annual trout or char close season.

- Morsillo, G. (1962)** MF  
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Usi civici di pesca e diritti esclusivi (Civic and exclusive fishing rights). *It*

- Bellini, L. (1962)** MF  
8-04620  
*Riv. tec.-giur. Pesca, 3 (3) : 285-309*

La legislazione speciale delle Valli di Comacchio nella sua genesi storica, nelle fonti e nell'applicazione (The special legislation for the Comacchio valleys in its historical genesis, in its sources and in its application). *It*

- Mundula, G. (1962)** MF  
8-04621  
*Riv. tec.-giur. Pesca, 3 (3) : 310-7*

Sui termini per la presentazione delle domande di riconoscimento di diritti esclusivi di pesca (On the conditions for the presentation of requests for the reappointment of exclusive fishing rights). *It*

Interpretation and discussion of the Italian legislation.



MF

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**Battisti, C.** (1962)

*Boll. Atlante ling. Medit.*, (2-3) : 61-96

Sui grecismi dell'itti nimia latina (On the graccisms of Latin fish names).  
*It*

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MF

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**Ineichen, G.** (1962)

*Boll. Atlante ling. Medit.*, (2-3) : 97-106

Italienische Fischnamen bei Jovius (Italian fish names from Jovius)

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**Balchin, W. G. V.** (1962)

*New Scient.*, 16 (308) : 108

Conserving the world's water

Final report of the Water Research Programme organized under Professor Arthur Maass to work out methods of choosing the right and most economic design method of multi-unit, multi-purpose water resource development in any given river basin. The greater part of the book is devoted to a detailed presentation of method and techniques for translating design criteria into actual designs by means of combined economic and engineering analysis. New methods of river system design and a comparison with those now in use are featured.

F

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Bibliographie des ouvrages et articles de périodiques de langue française relatifs à la pisciculture (Bibliography of monographs and articles from French periodicals on fishculture)

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Co 8-04625. Artificial fertilization, feeding, stocking, acclimatization, equipment and methods of fishculture.

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Field computations in engineering and physics

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- Tanner, W. F.** (1962)  
*J. sediment. Petrol.*, 32 (1) : 147-8  
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 Members of the society of economic paleontologists and mineralogists  
 Names and addresses of 1712 members.

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- Hamblin, W. K.** (1962)  
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 X-ray radiography in the study of structures in homogeneous sediments

Ill. Techniques for determining the distribution of minerals, fabric, fractures, stratification and other structural features of rock.

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- Morris, W. J. & Pew-Foong Fan** (1962)  
*J. sediment. Petrol.*, 32 (2) : 226-30  
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 An objective approach to the measurement of behavior

Detailed consideration of theoretical problems in the measurement of behavior, including a classification of individual and social behavioral responses.

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- Maxwell, G.** (1962)  
*Phil. Sci.*, 29 (2) : 132-8  
 Theories, frameworks and ontology

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Actes de la réunion scientifique mondiale sur la biologie du thon et des espèces voisines, La Jolla, California, E.U.A., 2-4 juillet 1962 (Proceedings of the world scientific meeting on the biology of tunas and related species, La Jolla, California, U.S.A., 2-14 July 1962)

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- Buşniţă, Th.** (1961) M  
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*Hidrobiol.*, Bucharest, (3) : 47-66

Cercetări ihtiologice marine româneşti din ultimii cinci ani (1954-1959) (Roumanian marine ichthyological studies from 1954 to 1959). *Ro Ru Fr*

A review of the work accomplished, outlining future lines of investigation using newly available research facilities.

- FAO Working Party for Rational Utilization of Tuna Resources in the Atlantic Ocean. First session, FAO, Rome: 25-30 October 1963** (1963) M  
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Report of the . . .

*Pr* 62-086me. Explains background, objectives and organization, results achieved, conclusions and recommendations obtained. Incl. lists of officers of the meeting, participants and working and information papers presented.

- Fourmanoir, P. & A. Crosnier** (1961)\* M  
8-05004  
Madagascar, I.O.R.S.T.O.M: Centre de Nosy-Be

Rapport sur la campagne de pêche au thon à la palangre dérivante, faite par le 'Maran Atha' dans les environs de Majunga (Côte nord-ouest) du 21 septembre au 15 octobre 1961 (Report on the longline fishing cruise made by the 'Maran Atha' in the neighbourhood of Majunga (northwest coast) from 21 September to 15 October 1961)

**Stoianov, S. (1961)**M  
8-05005*Hidrobiol., Bucharest, (3) : 99-114*

Rezultaty gidrobiologicheskikh, gidrologicheskikh i ikhtiologicheskikh issledovaniy, provedennykh v N.R. Bolgarii, za period 1954-1959 gg. (Results of hydrobiological, hydrological and ichthyological investigations carried out by the National Republic of Bulgaria, during the year 1954-1959).  
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'Orsom III'—Compte-rendu des croisières de l'année 1960 ('Orsom III'—Report of the cruises during 1960)

Report on cruises carried out for oceanographic observations, primary production and zooplankton, and fisheries research.

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8-05007*Contr. Mar. Biol. Univ. Wales, (1960-1961) : 2 p.*

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8-05008

Mimeo, 29 p.

Proceedings of the ...

Review and forecast of research programs of various laboratories, world and regional tuna conferences, tuna fishery in the eastern and central Pacific, with statistics affecting populations and advances in the study of ecology and behavior of tunas.

**France. Institut Scientifique & Techniques des Pêches Maritimes (1959)**M  
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Programme de la campagne du 'Président-Théodore-Tissier'—premier trimestre 1959 (Program of the cruise of the 'Président-Théodore-Tissier'—first trimester 1959)

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8-05010*Sci. et Pêche, (100) : 2-5*

Rapport préliminaire sur la campagne de la 'Thalassa' en mer de Norvège et mer de Barents, 29 octobre-15 décembre 1961 (Preliminary report on the cruise of the 'Thalassa' in the Norwegian and Barents Seas—28 October-15 December)

Organization of cruise, areas investigated, and results.



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The role of UNESCO in the development of oceanography

Work of UNESCO's International Advisory Committee on Marine Sciences; its Intergovernmental Conference on Oceanographic Research, and formation of its Intergovernmental Commission on Oceanography.

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Biology of the White Sea

Translation of two articles and the table of contents from *Biologiya Belogo moria*, Moscow, v. 1, 1962. Incl. bibliographies.

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*Transl. Ser. U.S. Bur. comm. Fish., Terminal I.*, (4) : 13 p.  
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*New Scient.*, 16 (311) : 246  
NATO proposal for a great science institute

Short notice on a proposal for an international institute for science and technology, suggested by NATO, the Earth sciences centre will include oceanographic research.

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*Hidrobiol.*, Bucharest, (3) : 389 p.  
Hidrobiologia. Lucrările comisiei de hidrologie, hidrobiologie și ihtiologie (Hydrobiology. Works of the commission of hydrology, hydrobiology, and ichthyology). Ro

Contains contributions and resolutions of the symposium on the biology of the Black Sea, Constance, 25-28 May 1960.

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1958-1960 report by the Kingdom of the Netherlands to the Food and Agriculture Organization of the United Nations

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Describes the scientific activities of the laboratory, library, and physical facilities.

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Report of the Hydrobiological Research Council of Peru. Contains administrative and organizational matters, scientific and technical programs and activities, facilities available; projects of development.

- Dauntsey's School Natural History Society** (1961) F  
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Observații și măsurători asupra oscilațiilor de nivel actuale și seculare ale apelor Mării Negre la țărmul rominesc (Observations and measurements of variations of the present and past level of the waters of the Black Sea on the Roumanian coast). Ro Ru Fr

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**Kühlmann, D. H. H. (1961)**

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Zur Anwendung der Direktbeobachtung in der Hydrobiologie mittels autonomer Tauchgeräte (On the applications in hydrobiology of direct observations made by the autonomous diving suit). Ro

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Observații asupra condițiilor hidrologice din zona bosforică a Mării Negre, în primăvara anului 1959 (Observations made during the spring of 1959 on the hydrological conditions of the Bosphorus zone of the Black Sea). Ro Ru Fr

Study of currents and salinity and zooplankton, with observations on movements of Mediterranean waters in the Black Sea.

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**Vinogradov, K. A. (1961)**

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Rezultaty gidrobiologicheskikh issledovani, provedennykh SSSR v 1954-1959 gg. na Chernom more, preimushchestvenno v ego severo-zapadnoi chasti (Results of hydrobiological investigations carried out by USSR in the years 1954-1959 in the northwestern part of the Black Sea). Ro

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**Hinschberger, F. (1962)**

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Résultats de 14 stations hydrologiques dans l'Iroise et à ses abords (Results from 14 hydrological stations in the Iroise and its adjoining areas)

Preliminary results of observations made in summer 1962 by the research vessel 'Kornog'.

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Sur la répartition en profondeur du benzo-3.4 pyrènes dans une carotte de la baie de Villefranche-sur-Mer (On the vertical distribution of benzo-3.4 pyrenes in a core taken off Villefranche-sur-Mer)

Preliminary note discussing the possible role played by living organisms in the distribution of hydrocarbon.

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Preliminary note on the effect of  $\text{GeO}_2$  and  $\text{Mo}_6\text{O}_{17}$ .

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Oceanographic data record, North Pacific surveys, May 16 to July 1

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(The discovery of submerged highlands on the sea bottom of the Indian Ocean). *Ru*

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The discovery of submerged highlands on the sea bottom of the Indian Ocean

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A portable temperature indicator

Oceanographic instruments.



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**Texas. Agricultural & Mechanical College, College Station.**

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Summary report—Cruise 62-H-10, July 17–August 13, 1962: Galveston, Texas–Kingston, Jamaica–Nicaragua–Honduras Shelf

Oceanographic research: studies on sedimentation and deposition.

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8-05038

*Dtsch. hydrogr. Z.*, 14 (4) : 121–35

Über Herkunft, Verteilung und Nachweismöglichkeit künstlich radioaktiver Stoffe im Meer (On the origin, diffusion and methods of tracing artificial radioactive material in the sea). En Fr

Based on literature summarizing outline is given discussing present problems and danger of radioactive material in sea.

M

**Schmitz, H. P. (1961)**

8-05039

*Dtsch. hydrogr. Z.*, 14 (4) : 135–52

Existenzbedingungen für stationäre und beschleunigungsfreie Strömungsfelder auf der rotierenden Erde, Insbesondere am Äquator (Conditions of existence of stationary current fields without acceleration on the rotating earth, especially along the equator). En Fr

Presence of vanishing horizontal pressure gradient along equator may admit of current which owes its formation to balanced action of Coriolis force and pressure field. Taking friction into account, horizontal currents without acceleration found to occur along equator, accompanied by meridional convergence or divergence. Results are in contradiction to opinion that stationary fields of ocean currents are approximately free of acceleration and, hence, are geostrophic.

M

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8-05040

*Dtsch. hydrogr. Z.*, 14 (4) : 152–8

Über den Ursprung der Roller vor Ascension (On the origin of the rollers off the Island of Ascension). En Fr

From weather maps days are computed on which from 1943 to 1954 high swell waves from northern North Atlantic were expected. Computed 'arrival dates' confronted with days on which rollers observed near shore of Ascension. Result leads to conclusion that part of the rollers were produced in the storm area of the North Atlantic.

**Wüst, G. (1961)**

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8-05041

*Dtsch. hydrogr. Z.*, 14 (3) : 81-92

Das Bodenwasser und die Vertikalzirkulation des Mittelländischen Meeres (The bottom water and the vertical circulation of the Mediterranean Sea).  
En Fr

Co 61-10741. Continues studies of deep circulation with regard to distribution and mixing in bottom water at depths of 1500 m and more. Detailed verification of observational material comprising 234 stations of 11 research vessels is presented and further proofs concerning formation of North Balearic and Adriatic bottom water are given. Schematic diagram shows vertical circulation and salinity distribution and combined action of their zonal and meridional components during winter. As a supplement to 1960 paper, chart is added showing core layers of the "levantine intermediate water" based on 'Armauer Hansen' stations from May and Jun. 1931.

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The K.N.M.I.-method of forecasting wind induced sea level height disturbances. De Fr

Method used at Koninklijk Nederlands Meteorologisch Instituut (De Bilt) for forecasting effects of the wind on sea level heights along the southern coast of the North Sea is described briefly, mainly from the practical side.

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**Christoph, P. (1961)***Dtsch. hydrogr. Z.*, 14 (3) : 98-113

Der Arma-Brown-Kreiselkompass—Aufbau und Eigenschaften (The Arma-Brown gyro-compass—its structure and properties). En Fr

Deals with principles of construction, technical design and properties. Report given on test results from laboratory and, in particular, of a test at sea.

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**Toba, Y. (1961)***J. oceanogr. Soc. Japan*, 17 (4) : 169-78

(Drop production by bursting of air bubbles on the sea surface. 3. Study by use of a wind flume (short report)). Ni En

Measurement of small droplets produced by bursting of air bubbles entrained in wind waves and determination of the production rate of droplets of each size grade.

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**Takane, K. (1961)***J. oceanogr. Soc. Japan*, 17 (4) : 179-89

Circulation générale permanente dans les océans—deuxième partie (suite et fin) (General permanent circulation of the ocean—2nd part (continuation and end)). En

Results of numerical calculations of wind-driven circulation and convective circulation produced by density distribution at the surface.

**Takane, K.** (1961) M  
8-05046  
*J. oceanogr. Soc. Japan*, 17 (4) : 190-6

Distribution de densité à la surface d'un océan de longueur indéfinie en fonction de la latitude (Distribution of density at the surface of an ocean of indefinite length as a function of latitude). En

Determination of surface density in a canal indefinitely [*sic*] extended in east-west direction and subject to wind stress and heat flux from sun and atmosphere, assuming constancy of salinity.

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*J. oceanogr. soc. Japan*, 17 (4) : 197-200

On the difference in the monthly sea level between Kushimoto and Uragami, Japan

Examination of relation between sea level and current pattern.

**Imai, Y.** (1961) M  
8-05048  
*J. oceanogr. Soc. Japan*, 17 (4) : 201-4

(Oceanographical studies on the behaviour of chemical elements. 6. On the distribution of molybdenum in sea water in Uranouchi Bay and Susaki Bay). Ni En

Analytical results and examination of relation between molybdenum and chlorinity. Co 62-02985.

**Imai, Y.** (1961) M  
8-05049  
*J. oceanogr. Soc. Japan*, 17 (4) : 205-7

(Oceanographical studies on the behaviour of chemical elements. 7. On the distribution of molybdenum in sea water in Urado Bay). Ni En

Co 8-05048. Continuation of previous paper extending study of relations to dissolved oxygen and iodine.

**Koshimizu, N.** (1961) M  
8-05050  
*J. oceanogr. Soc. Japan*, 17 (4) : 208-14

(The study of chlorinity determination. 1. The error in the chlorinity determination by the Knudsen method and the method of calculation of  $k$ ). Ni En

Examination of the importance of titration and drop error to the correction factor  $k$  in Knudsen's tables, and a table of recalculated values of  $k$ .

**Ridgway, N. M.** (1962) M  
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*N.Z.J. Geol. Geophys.*, 5 (2) : 243-55

Tidal current patterns between Mana Island and Titahi Bay, west coast, North Island

Observations of surface water movements in a coastal channel using fluorescein dye. Time of change of direction of the tidal stream is compared with time of high water, and circulation patterns within Titahi Bay are related to direction of tidal currents through the channel .

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**Cullen, D. J.** (1962)

8-05052

*N.Z.J. Geol. Geophys.*, 5 (2) : 271-5

The influence of bottom sediments upon the distribution of oysters in Foveaux Strait, New Zealand

Investigation of the sediments in Foveaux Strait has revealed a clear correlation between the distribution of the oyster beds and the occurrence of medium to fine sandy pebble gravel.

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**Tzuchiya, M.** (1961)

8-05053

*Oceanogr. Mag., Tokyo*, 13 (1) : 1-30

An oceanographic description of the equatorial current system of the western Pacific

Based on oceanographic data obtained in the western Pacific during 1925-1941, and using geostrophic computations, describes the equatorial current system, the equatorial countercurrent and undercurrent, and the south equatorial current and the equatorial upwelling.

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**Konaga, S.** (1961)

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*Oceanogr. Mag., Tokyo*, 13 (1) : 31-40

Kurushio in Enshu-nada (111)—Variations of the depth of isotherms

Examination of the relation between oceanographic conditions in the cold water region off Enshu-nada and the variation in the depth of isotherms of period the same as that of the ordinary tide.

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**Yasui, M. et al.** (1961)

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*Oceanogr. Mag., Tokyo*, 13 (1) : 41-9

Soundings of the Kamapo Deep

Summary of the results of sounding operations in Jun. 1960.

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**Miyazaki, M., T. Ueno & S. Unoki** (1961)

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*Oceanogr. Mag., Tokyo*, 13 (1) : 51-75

Theoretical investigations of typhoon surges along the Japanese coast

Computation of typhoon-surge distributions in Tokyo, Osaka and Ise Bays by a numerical method based on hydrodynamic equations and integration of each equation numerically by giving the terms of external forces.

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**Anon.** (1962)

8-05057

*Results mar. Obsns, Tokyo*, (28)

Tables and charts presenting results of observations in Japanese seas, Jun.-Dec. 1960.



**Vella, P.** (1962) M  
8-05058  
*Tuatara*, 10 (1) : 19-40

Determining depths of New Zealand tertiary seas; an introduction to depth paleoecology

Discussion of scope and methods of paleoecology; depth distribution of present-day marine organisms; determination of fossil biofacies and their depth order.

**Mackin, J. G. & A. K. Sparks** (1962) M  
8-05059  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 7 (1961) : 230-61

A study of the effect on oysters of crude oil loss from a wild well

Reports the results of comparison of oyster growth and survival in areas affected by oil spill and in control stations.

**Mackin, J. G. & S. H. Hopkins** (1962) M  
8-05060  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 7 (1961) : 1-131

Studies on oyster mortality in relation to natural environments and to oil fields in Louisiana

Summarizes researches and findings on the Louisiana oyster industry and its history, the environmental conditions in the area where oyster mortality was claimed, and the interrelationships of the oil and oyster industries in that area.

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Major features of the zonation pattern are described; the secondary organisms associated with the major zones are listed; the zonation pattern is compared with similar ecological situations in Australia, New Zealand, South Africa and South America.

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Vertical distribution of species, constitution of communities, and advanced stage of communities with reference to growth and life form of their members.

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Popular ill. article on the methods of harvesting and of processing the egg and sperm sacs of the palolo worm with an account of the reasoning on which a prediction is made of the casting of the sacs.

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Description of general behaviour and morphology with anatomical drawings.

- Dell, R. K.** (1962) M 8-05227  
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New entities and combinations in the Phaeophyceae of New Zealand

BAgr. 26 (1) 213.

**Koster, J. T.** (1961)

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*Bull. Res. Coun. Israel*, 10D (1/4) : 90-3

On the delineation of species of Cyanophyceae

BAgr. 26 (1) 221.

**Petrov, Yu. E.** (1961)

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Cyanophyceae maritimae novae e Murmano (Marine Cyanophyceae new for Murmansk). Ru

BAgr. 26 (1) 223.

**Proshkina-Lavrenko, A. I.** (1961)

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*Mater. bot. Inst. im. V. L. Komarova (Spor. Rast. Bot.)*, 14 : 23-32

Species *Chaetoceras* ehr. novae e Mari azoviano (maeotico) (The species *Chaetoceras* Ehr. new to the Azov Sea). Ru

BAgr. 26 (1) 228.

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 BAgr. 26 (1) 227.

**Daniel, A.** (1962)M  
8-05242*Ann. Mag. nat. Hist.*, (13), 5 (52) : 193-7On a new species of operculate barnacle (Cirripedia: Crustacea) from the gastropod mollusc, *Murex* sp. from Porto Nuovo, Madras StateDeals with the description of a n. sp. of the subgenus *Semibalanus* of the genus *Balanus*.**Rutherford, D. J.** (1962)M  
8-05243*Ann. Mag. nat. Hist.*, (13), 5 (52) : 199-204A rare hydromedusan, *Staurophora mertensi*, at St. Andrews

Records occurrence of this Arctic sp. and gives ill. description of features.

**Clark, A. M.** (1962)M  
8-05244*Ann. Mag. nat. Hist.* (13), 5 (52) : 243-51

A new genus and species of recent starfishes belonging to the aberrant family Sphaerasteridae, with notes on the possible origin and affinities of the family

Describes *PODOSPHAERASTER*, gen. nov. and spp. with remarks on the possible origin and affinities of the Sphaerasteridae.**Millar, R. H.** (1962)M  
8-05245*Ann. Mag. nat. Hist.*, (13), 5 (54) : 337-40Budding in the ascidian *Aplidium petrense* Michaelsen

Observations show that buds are formed from the abdomen and postabdomen instead of from the post-abdomen alone as in most polyclininid ascidians.

**Griffith, G. W. & M. Castagna** (1962)M  
8-05246*Chesapeake Sci.*, 3 (3) : 215-6

Sexual dimorphism in oyster drills of Chincoteague Bay, Maryland-Virginia

Reports results of quantitative study of the differences in maximum height of male and female *Urosalpinx cinerea follyensis* and *Eupleura caudata etterae*.**Skolka, V. H.** (1961)MF  
8-05247*Hidrobiol.*, Bucharest, (3) : 368-76

Două specii noi de Rhodophyceae cu o interesantă adaptare la viața dulcicolă (Two new species of Rhodophyceae presenting interesting aspects of adaptation to freshwater). Ro Ru Fr

Description of *Laurencia lacustris* and *Melobesia phragmiticola* n. spp. adapted to fresh water.



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 Paris, Masson & Cie, 1053 p. & MLV-MCXVI 8-05250  
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Ontogénèse des Annélides (Ontogenesis of annelids)

**Prenant, M.** (1959)

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Classe des Myzostomides (Class of Myzostomida)

**Andre, F.** (1961)

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Algues du Portugal: liste préliminaire (Algae from Portugal; preliminary list)

BAgr. 25 (11) 87046.

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*Botaniste*, 14 (1/6) : 209-22

Sur une chaetophoracée observée dans des cultures de diverses ulvacées provenant de régions saumâtres: *Ulvella protuberans* nov. sp. (On a chaetophorean observed in different ulvacean cultures from brackish waters: *Ulvella protuberans* nov. sp.)

BAgr. 25 (11) 87053.

**Pillai, T. G.** (1961)

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*Ceylon J. Sci.*, 4 (1) : 1-40

Annelida Polychaeta of Tambalagam Lake, Ceylon

III. morphological description of 20 spp. of which 13 are new, one involving description of a new genus; 3 of the known spp. are newly recorded for Ceylon. Key for the genus *Notomastus* collected from a brackish-water lake.

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*Rep. Fac. Fish. Univ. Mie*, 3 (3) : 708-40

(On the culture of mixohaline rotifer *Brachionus plicatilis* O. F. Müller in the sea water). *Ni En*

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Les variations de la teneur en calcium total de l'hémolymphe chez *Astacus pallipes* Lereboullet (The variations of the total calcium in the hemolymph of *Astacus pallipes* Lereboullet)

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*Anal. știint. Univ. Iași (Științe nat.)*, 6 (1) : 9-18

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**Hușanu, O. (1960)**F  
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*Anal. știint. Univ. Iași (Științe nat.)*, 6 (1) : 134-8

Contribuțiuni la cunoașterea gasteropodelor din Moldova (Contribution to the knowledge of gastropods of Moldavia). Ro Ru Fr

Lists 43 spp. collected from various localities, 22 of which are new to the province.

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Plecopterele Carpaților orientali. 1. Contribuții la cunoașterea plecopterelelor din Bistrița și din afluenții săi în zona lacului de baraj Bicaz (The Plecoptera of the Oriental Carpathes. 1. Contributions to the knowledge of Plecoptera of the Bistritza and its tributaries in the zone of the reservoir of Bicaz). Ro Ru Fr

Check list of 23 spp.

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Two spp. of parasitic isopod Crustacea from Firth of Clyde and northern seas: anatomical variations, choice of host spp., numerical and seasonal fluctuations, effects on longevity of host, growth of parasite in relation to host, effect on reproductive organs of host, post-larval growth and reproduction.

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History of Oregon shrimp fishery, review of research program; gear and methods of exploration, with charts of bottom types, locations of lands etc. Catches of spp. of *Pandulus*, *Crangon* and others; catch-depth relationships; sex and size compositions incidental fish catches, log of cruise.

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Du chalut de fond à grande ouverture verticale au chalut flottant (From deep water trawls of large vertical opening to floating trawls)

Characteristics and utilization of deep water and floating trawls.

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Comparison of fishing efficiency of a hook weighted with lead against normal hook in fishing for tuna under various sea conditions.

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Description of cleaning establishment using sterile sea-water and ultra-violet light.

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8-05319  
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Report of a visit to the South Pacific Commission's boatbuilding school at Auki in the British Solomon Islands.

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8-05320  
*Cah. Inform. Sta. Biol. mar. Grande-Rivière*, (12) : 15 p.  
 Le filet maillant, son utilisation pour la pêche des poissons de fond (The gill-net, its utilization for bottom fisheries)

Description, mounting and use.

- Suzuki, T. & M. Kato** (1961) M  
8-05321  
*Mon. J. Fish. Sci., Tokyo*, 3 (8) : 77-87  
 Fish finder records in the Philippines. *Ni*

Illustrated paper on work being carried out on FAO/EPTA assignment.

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8-05322  
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8-05323

**Singh, K. S.** (1962)

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Co 62-00441. Second instalment of checklist of parasites reported in the literature from all animals in India, includes Cestoda reported from reptiles, amphibians and fishes.

MF  
8-05324

**Dollfus, R. Ph.** (1961)

Vie et Milieu, 12 (4) : 579-88

Sur un trématode hémuride de l'anguille de l'étang de Thau (A trematode hemiurid of the eels of the pond of Thau)

Describes specimens of *Sterrhurus musculus* from *Anguilla anguilla*.

MF  
8-05325

**Paz-Andrade, V.** (1962)

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MF  
8-05326

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F  
8-05327

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F  
8-05328

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**Horie, S.** (1961)

J. Tokyo Univ. Fish., 47 (2) : 281-8

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X  
8-05329



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8-05330
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8-05331
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- M  
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Observations on *Trachurus mediterraneus ponticus*.

- M  
8-05334
- Porumb, I. I.** (1961)  
*Hidrobiol., Bucharest*, (3) : 271-82
- Contribuții la cunoașterea biologiei guvizilor (*Gobius batrachocephalus*, *Gobius cephalarges* și *Gobius melanostomus*) din dreptul litoralului românesc al Mării Negre (date preliminare) (Contribution to the knowledge of the biology of gobies (*Gobius batrachocephalus*, *Gobius cephalarges* and *Gobius melanostomus*) of the Black Sea off the Roumanian coast; preliminary data). Ro Ru Fr

Quantitative and qualitative study of the food of the spp., variations on seasonal feeding, notes on spawning seasons.

- M  
8-05335
- Symposium on Scombroid Fishes held under the auspices of the Marine Biological Association of India, Mandapam Camp, January 12-15, 1962** (1962)  
Mandapam Camp, Marine Biological Association of India, 46 p.  
Abstracts of papers

**Jones, S. & E. G. Silas (1962)**

*In* 8-05335

A systematic review of the scombroid fishes of India

M  
8-05336

A review of the mackerels, tuna and tuna-like fishes; Spanish mackerel or seerfishes; and bill fishes occurring in Indian seas is given. Meristic and morphometric details for the spp. and wherever necessary nomenclatorial discussions on the spp. are also included. A key for the identification of the different spp. is presented.

**Smith, J. L. B. (1962)**

*In* 8-05335

Scombroid fishes of the western Indian Ocean and of South Africa

M  
8-05337

Enumerates the spp. of Xiphiidae, Istiophoridae, Scomberomoridae and Scombridae, and discusses their habits, ecology, taxonomy and economic value.

**de Boucherville Baissac, J. (1962)**

*In* 8-05335

Scombroid fishes of Mascaron waters

M  
8-05338

The scombroid fishes occurring in the waters around Reunion, Mauritius and Rodrigues Islands, are listed. They belong to the genera *Thunnus*, (*Neothunnus*), *Gymnosarda*, *Euthynnus*, *Katsuwonus*, *Rastrelliger*, *Scomberomorus*, *Acanthocybium*, *Istiophorus* and *Makaira*. A brief account is given on the extent of the fishery of a new sp. Their local names, the gear used for capture, the average weight of the spp. caught, and the method of disposal of the catches are also given.

**Whitley, G. P. (1962)**

*In* 8-05335

Scombroid fishes of Australia and New Zealand

M  
8-05339

A synopsis of tunas, billfishes, mackerel, and seerfishes briefly outlining their synonymy, key characters, sizes and known distribution. There are 25 genera concerned.

**Blanc, M. & M. L. Bauchot (1962)**

*In* 8-05335

The scombroidei of the Museum of Natural History, Paris

M  
8-05340

29 types of spp. (53 specimens). To those types are added: 57 historical exemplaries and 9 new spp.

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- Dick, M. M.** (1962) M  
8-05341  
*In* 8-05335  
 Scombroid fishes in the Museum of Comparative Zoology, Harvard University

The scombroid fishes are listed, with additional data on numbers available for examination, and localities of their occurrence.

- Jones, S. & E. G. Silas** (1962) M  
8-05342  
*In* 8-05335  
 Mackerel from the Andaman Sea

The spp. are indicated. Nomenclatorial discussions on *R. kanagurta*, *R. brachysoma*, and *R. neglectus* are included along with morphometric and meristic details.

- Rivas, L. R.** (1962) M  
8-05343  
*In* 8-05335  
 Key to the Atlantic Ocean tuna fishes of the genus *Thunnus*

The sub-genera are characterized mainly on the basis of internal characters. The geographical distribution and the most widely used names are given for each sp. following the diagnostic key characters.

- Silas, E. G.** (1962) M  
8-05344  
*In* 8-05335  
 Aspects of the taxonomy and biology of the oriental bonito, *Sarda orientalis* (Temminck and Schlegel)

A taxonomic discussion on the sp. is presented along with a redescription of the sp. based on material from Indian waters. Comparisons are also drawn with available data on typical material from Japanese waters. Some observations are made on the fecundity and spawning periodicity of the sp.

- Silas, E. G.** (1962) M  
8-05345  
*In* 8-05335  
*Cybbium croockewiti* Bleeker (1850) and *Cybbium koreanum* Kishinouye (1915) considered synonyms of *Scomberomorus guttatus* (Bleek and Schneider), with a redescription, species synopsis, and annotated bibliography of *S. guttatus*

- Balakrishnan, V.** (1962) M  
8-05346  
*In* 8-05335  
 Studies on the fin ray counts in the median fins of the Indian mackerel, *Rastrelliger kanagurta* (Cuvier)

The variability in the number of rays of the dorsal and anal fins has been studied by adopting the clearing and straining technique.

**Gnanamuttu, J. C. & G. Seshappa** (1962)

M  
8-05347

In 8-05335

On the osteology of *Rastrelliger kanagurta* (Cuvier)

A detailed study of the different bones of the skeleton.

**Jones, S. & M. Kumaran** (1962)

M  
8-05348

In 8-05335

Larvae and juveniles of Indian seombroid fishes

The available information on the larvae and juveniles of the seombroid fishes known to occur in the Indian Ocean is briefly reviewed and the typical stages are described and figured. An arbitrary key to the identification of the larvae is also provided.

**Ueyanagi, S.** (1962)

M  
8-05349

In 8-05335

Description and distribution of larvae of five istiophorid species in the Indo-Pacific

Shortnosed spearfish (*Tetrapturus angustirostris*), sailfish *Istiophorus orientalis*, striped marlin (*Makaira mitsukurii*), black marlin (*Eumakaira nigra*), white marlin (*Marlina marlina*) are described and diagnostic characters are given to aid in the identification of the spp. The geographical and seasonal distribution of larvae are described.

**Rao, K. V.** (1962)

M  
8-05350

In 8-05335

The distribution of juvenile stages of the mackerel, *Rastrelliger kanagurta* (Cuvier) in the Indian inshore waters

**Suda, A. & T. Shiohama** (1962)

M  
8-05351

In 8-05335

Studies on the albacore—7. Some considerations on the relationship between the distribution of albacore and the surface water temperature in the long-line fishing ground of the North West Pacific

Attempts to evaluate the availability of fish shoals, the possibility of forecast of some kind of fishing condition, and to estimate more effectively the amount of catch, hooked-rate, size of year, etc.

**Jones, S. & M. Kumaran** (1962)

M  
8-05352

In 8-05335

A preliminary study of the distribution of the larval billfishes (Xiphiidae and Istiophoridae), in the Indo-Pacific with special reference to collections made by the Danish Dana Expedition

The spp. dealt with are *Xiphias gladius* Linnaeus, *Tetrapturus angustirostris* (Tanaka), *Istiompax indicus*, *Makaira audax*, *M. mazara* and *Istiophorus gladius*. Charts showing larvae distribution in the Indo-Pacific are given.



M

**Tsuruta, S.** (1962)

8-05353

*In* 8-05335

Morphometric characters of yellowfin tuna *Germo macropterus* (Temminck and Schlegel), from south western waters of the Indian Ocean off Madagascar

Comparisons are drawn of body proportions of yellowfin tuna from the area investigated with samples from Costa Rica, Hawaii, S.W. Pacific, southwestern waters of the Greater Sunda Islands, Mid-Indian Ocean, S.E. Arabian Sea, and Angola.

M

**George, P. C.** (1962)

8-05354

*In* 8-05335

Our current knowledge on the nutrition of the Indian mackerel, *Rastrelliger kanagurta* (Cuvier) with suggestions for an effective study of the ecology of feeding in plankton feeding fishes

All the available information on the food and feeding relations of *Rastrelliger kanagurta* in the Indo-Pacific area is drawn up to get a clear picture of our present knowledge on the ecology of feeding of the sp. The 'number method' of analysis cross-checked with 'points method' is recommended, for examining gut contents and the food elements available in the environment.

M

**Noble, A.** (1962)

8-05355

*In* 8-05335

Food and feeding habits of the Indian mackerel, *Rastrelliger kanagurta* (Cuvier) at Karwar

M

**Rao, K. V. N.** (1962)

8-05356

*In* 8-05335

Observations on the bionomics of the Indian mackerel, *Rastrelliger kanagurta* (C.), caught in the Lawson's Bay, near Waltair, Andhra coast

Investigation based on 539 specimens of the Indian mackerel, *R. kanagurta* (C.), ranging in length from 32 to 243 mm. It includes several aspects of its bionomics.

M

**Rao, K. V. N.** (1962)

8-05357

*In* 8-05335

Food of the Indian mackerel, *Rastrelliger kanagurta* (C.), taken by drift nets in the Arabian Sea off Vizhingam, South Kerala

M

**Rao, V. R.** (1962)

8-05358

*In* 8-05335

Studies on the food and feeding habits of the mackerel *Rastrelliger kanagurta* (Cuvier) in the Mangalore zone

**Kumaran, M. (1962)**M  
8-05359

In 8-05335

Observations on the food of juveniles of *Scomberomorus commerson* (Lacépède) and *S. guttatus* (Bloch and Schneider) of the South Kerala coast

Post-larvae and juveniles of small fishes and crustaceans are the most favourite food items and there is some similarity in the food preferences of both spp.

**Rao, K. S. (1962)**M  
8-05360

In 8-05335

Observations on the food and feeding habits of *Scomberomorus guttatus* (Bl. Schn.) and of the juveniles of *S. commerson* (Lac.) of the Waltair coast

The food was found to be mainly composed of teleosts (70.0%) and crustaceans (24.6%) besides a few cephalopods and gastropods. The important teleostean items were *Anchoviella* spp. (12.0%), *Trichiurus* spp. (6.0%) and *Sardinella* spp. (5.0%), although *Caranx* spp., *Acanthurus* spp., percoids, and *Leiognathus* spp. etc. were also met with occasionally. The crustaceans were represented by alima larvae (20.0%) and *Acetes* sp. (3.5%). Juveniles of *S. guttatus* and *S. commersonii* were also observed to be feeding mainly on teleosts, namely *Anchoviella* spp. and *Sardinella* spp.

**Kumaran, M. (1962)**M  
8-05361

In 8-05335

Studies on the food of juveniles and adults of *Euthynnus affinis affinis* (Cantor), *Auxis thynnoides* Bleeker and *Sarda orientalis* (Temminck and Schlegel)

The results obtained by the analysis of the stomach contents of juveniles and adults collected from the inshore areas of Vizhingham, Tuticorin and Cape Comorin are presented.

**Raju, G. (1962)**M  
8-05362

In 8-05335

Observations on the food and feeding habits of the oceanic skipjack *Katsuwonus pelamis* (Linn.) from Minicoy

The stomach contents of 2506 skipjacks sampled at random from the landings of pole and line fishing with live-bait are analysed by the general systems of analysis, viz., volumetric, numerical and occurrence.

**Thomas, P. T. (1962)**M  
8-05363

In 8-05335

The food and feeding habits of *Katsuwonus pelamis* (Linnaeus) with observations on the food of *Neothunnus macropterus* (Temminck and Schlegel) from Minicoy waters for the season 1960/1961

A brief study of the food and feeding habits of *Katsuwonus pelamis* by the examination of gut contents of specimens obtained from the catches in Minicoy during the period Nov. 1960-Apr. 1961. A qualitative analysis is made to determine the various items of the food. The volume of each food item in each stomach is determined. Some observations on the food of *Neothunnus macropterus* from the same locality for the same period, are also recorded.

- M  
8-05364
- Silas, E. G.** (1962)  
In 8-05335

Morphometric comparison and preliminary observations on the food and maturity of yellowfin tuna, *Neothunnus macropterus* (Temminck & Schlegel) caught in Indian waters

- M  
8-05365
- Watanabe, H.** (1962)  
In 8-05335

Frigate mackerel (genus *Auxis*) from the stomach contents of tuna and marlins

Some 1,300 frigate mackerel were found in stomachs of longline-caught tunas and marlins during the period from 1949 to 1958, inclusive.

- M  
8-05366
- Jones, S.** (1962)  
In 8-05335

A preliminary survey of the tuna baitfishes of Minicoy and their distribution in the Laccadive Archipelago

Over 40 spp. are listed and figured and information about them is given in a general way with their distribution in and around other islands of the Laccadive Archipelago. An arbitrary key for their identification is also furnished.

- M  
8-05367
- Thomas, P. T.** (1962)  
In 8-05335

A study of the fluctuations in the occurrence of the major tuna live-bait fishes of Minicoy

*Lepidozygus tapeinosoma*, *Caesio caerulaureus*, *Archamia lineolatus*, *Apogon sangiensis* and *Caesio chrysozoma* dominate. The size composition of *L. tapeinosoma*, *A. lineolatus* and *C. caerulaureus* for the period is given.

- M  
8-05368
- Raju, G.** (1962)  
In 8-05335

A study of the sexual maturity and spawning of *Lepidozygous tapeinosoma* Gunther—A principal live-bait of tuna at Minicoy

- M  
8-05369
- Bell, R. R.** (1961)  
In 8-05335

A history of tuna age determination

Reports the history of age determination for commercially important tunas. Tables of age and equivalent lengths or weights are presented for comparative purposes whenever the contents of the historical sources permit. Methods are described in several of the reviewed papers and are included where possible.

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**Bas, C.** (1962) M  
8-05370  
In 8-05335

Development and growth in certain Scombridae of the Spanish coast

Research on *Scomber scombrus* and *S. colias*.

**Seshappa, G.** (1962) M  
8-05371  
In 8-05335

On the problem of age-indicators in the scombroid fishes with special reference to *Rastrelliger kanagurta* (Cuvier)

**George, K. C.** (1962) M  
8-05372  
In 8-05335

Age and growth studies on the Indian mackerel *Rastrelliger kanagurta* (Cuvier) by the length frequency method

**Balakrishnan, V.** (1962) M  
8-05373  
In 8-05335

Spawning, rate of growth and age groups of *Rastrelliger kanagurta* (Cuvier) as observed at Vizhingam during 1955-1957

**Radhakrishnan, N.** (1962) M  
8-05374  
In 8-05335

Observations on the maturity and spawning of the Indian mackerel, *Rastrelliger kanagurta* (Cuvier) at Karwar

**Bennet, P. S.** (1962) M  
8-05375  
In 8-05335

The mackerel tuna *Euthynnus affinis affinis* (Cantor), in the Vizhingam fisheries

Estimated monthly landings of mackerel tuna, monthly landings of other spp. of tuna and their percentage in the total catch are presented in a tabulated statement. The position of the tuna fishery in the overall fishing industry at Vizhingam, based on the available statistics on fish catch, is discussed.

**Tsotomu, K. & K. Kodama** (1962) M  
8-05376  
In 8-05335

Some considerations on the growth of marlins, using size frequencies in commercial catches. 2. Attempts to estimate the growth of the so-called white marlin, *Marlina marlina*

Two methods are used for age determination of marlins. The first method is to assume the boundary of each age group in the length frequency distribution. The second method is to trace the modal points derived from length frequencies in commercial catches. An estimation of the growth of the so-called white marlin is made by these methods.



M  
8-05377

**Jones, S.** (1962)  
In 8-05335

The phenomenal fish mortality in the Arabian Sea in 1957—A speculation of the possible identity of the species concerned

The possibility that juvenile tunas could have been the subject of the catastrophe, at least partly, is pointed out. Reports relating to fish mortalities during the same year from other sources are also recorded.

M  
8-05378

**Thomas, P. T. & G. Raju** (1962)  
In 8-05335

Gonadal abnormalities in scombroid fishes

The gonadal abnormalities so far recorded are reviewed.

M  
8-05379

**Vijayaraghavan, P.** (1962)  
In 8-05335

Some observations on the spawning behaviour of mackerel

M  
8-05380

**Raju, G.** (1962)  
In 8-05335

Fecundity of the oceanic skipjack (*Katsuwonus pelamis* Linnaeus) of Minicoy

Fecundity length regression lines based on four different formulae and fecundity weight regression lines based on two different formulae are compared and discussed.

M  
8-05381

**Rao, K. V. N.** (1962)  
In 8-05335

An account of the ripe ovaries of some Indian tunas

Study based on several ripe ovaries of little eastern tunny *Euthynnus affinis*, frigate mackerel *Auxis thazard*, and oriental bonito *Sarda orientalis*, sampled from the drift net catches landed at Vizhingam (Lat. 08° 22' N, Long. 76° 59' E). Description and measurements of their ripe ovaries, ripe ova, together with an account based on a few ripe residual ova collected from a recently spent individual of the Indian long-tailed tunny, *Kishinoella tonggol*, are given.

M  
8-05382

**Raju, G.** (1962)  
In 8-05335

Spawning of the oceanic skipjack *Katsuwonus pelamis* (Linnaeus) in Minicoy waters

Eight arbitrary stages of maturity based on the mode of most mature groups of ova, which traces the development of the ova from the immature or resting stage through spawning stage are defined. Gonad index to determine rapidly and objectively the state of maturity of the gonad from weight and length is investigated.

- M  
8-05383
- Clemens, H. B. & P. M. Roedel** (1962)  
In 8-05335  
Tagging experiments on mackerel and tuna in the eastern Pacific
- Study of populations of Pacific mackerel (*Pneumatophorus diego*), skipjack (*Katsuwonus pelamis*), Pacific yellowfin tuna (*Neothunnus macropterus*), Pacific albacore (*Thunnus germon*), and California bluefin tuna (*Thunnus saliens*) in the eastern Pacific using the tag-and-recapture technique.
- M  
8-05384
- Nakagome, J.** (1962)  
In 8-05335  
Swimming layer of tuna in Indian Ocean
- Study of the seasonal variations in the swimming layer of tunas and marlins, and results obtained on yellowfin tuna and big-eyed tuna in the sub-area Lat. 5° N to 30° S.
- M  
8-05385
- Silas, E. G.** (1962)  
In 8-05335  
Behaviour of different species of tunas as noticed from long-line catches, with a résumé of our knowledge on tuna behaviour
- The available information about tuna behaviour is summarized.
- M  
8-05386
- Prasad, R. R. & P. V. R. Nair** (1962)  
In 8-05335  
Preliminary observations on the productivity of certain tuna waters off the west coast of India
- The results of the <sup>14</sup>C experiments as well as similar data collected by the 'Galathea' and 'Vityaz' expeditions, are discussed.
- M  
8-05387
- Silas, E. G. & A. N. P. Ummerkutty** (1962)  
In 8-05335  
On parasites from Indian scombroid fishes
- Part 1 deals with the copepod parasites collected from Indian scombroids, *Sarda orientalis*, *Auxis* spp., *Neothunnus macropterus*, *Gymnosarda unicolor*, *Grammatorcynus bicarinatus*, *Scomberomorus* spp., *Istiophorus gladius*, *Makaira* spp., etc. Part 2 deals with the helminth parasites collected from these fishes; copepod and helminth parasites described from these fishes earlier from Indian waters as well as extra-Indian waters have been included.
- M  
8-05388
- Jones, S.** (1962)  
In 8-05335  
The scombroid fishery of India—present and future
- The fishery constituted by scombroid fishes in India is briefly outlined and its future potentialities, especially in view of the possibilities of further development of the tuna fishery, are indicated.

- M
- Chacko, P. I., S. D. Thomas & C. M. Pillai** (1962) 8-05389  
*In* 8-05335  
 Scombroid fishery of Madras State, India

Important spp. are *Rastrelliger kanagurta*, *Euthynnus affinis*, *Neothunnus macropterus*, *Kishinoella tonggol*, *Katsuwonus pelamis*, *Cybium commersoni*, *Indocybium guttatum*, *Indocybium lineolatum* and *Xiphias gladius*. Fishing grounds off Kanyakumari, gulf of Mannar, Palk Bay and Coromandel coast and the gear used are described. A national programme of exploratory fishing, charting of fishing grounds, introduction of new types of capture methods and oceanographic and biological surveys is outlined.

- M
- Pathansali, D.** (1962) 8-05390  
*In* 8-05335  
 A note on the scombroid fishery in Malaya

The importance of the inshore scombroid fishery, the main spp. landed, their occurrence and seasonal variation along the coastal waters of Malaya, and the gears employed in the fishery with the percentage capture by each gear, are outlined briefly.

- M
- Bas. C.** (1962) 8-05391  
*In* 8-05335  
 Fisheries of scombroids of the Spanish Mediterranean

Mackerel *Scomber scombrus*; bluefin tuna *Thunnus thynnus*; bonito *Pelamys sarda* and the frigate mackerel *Auxis thazard* are exploited. Small quantities of albacore *Germo alalunga* are present sometimes. The landings are different according to spp. and years.

- M
- Kutty, M. N.** (1962) 8-05392  
*In* 8-05335  
 Observations on the Indian mackerel, *Rastrelliger kanagurta* (Cuvier) from the trawl catches along the Bombay coast

- M
- Rao, P. V.** (1962) 8-05393  
*In* 8-05335  
 Line fishery for *Rastrelliger kanagurta* (Cuvier), along the North Kanara coast

- M
- Sekharan, K. V.** (1962) 8-05394  
*In* 8-05335  
 On the mackerel fishery of the Mandapam area during the years 1952-1956

- M
- Rao, V. R., K. V. Sekharan & M. J. Pradhan** (1962) 8-05395  
*In* 8-05335  
 On the mackerel fishery of the Mangalore area during the period 1957-1961

**Silas, E. G. (1962)**M  
8-05396

In 8-05335

Bioluminescence and mackerel fishery

The desirability of exploring possibilities of using purse seines for fishing mackerel at night in Indian waters is indicated.

**Jones, S. (1962)**M  
8-05397

In 8-05335

The mackerel fishery of Pangkor, Malaya

Information on the mackerel fishing industry of Pangkor is given. Suggestions for improving the mackerel fishery industry in India by adopting some of the methods followed in Pangkor are given.

**Silas, E. G. (1962)**M  
8-05398

In 8-05335

Tuna fishery of the Tinnevely coast, gulf of Mannar

Data presented on this fishery includes first-hand observations made by the author on trolling in the actual fishing grounds, the spp. and size compositions in the catch, the mode of disposal of the catch, the price structure prevalent, etc. The spp. caught are *Euthynnus affinis affinis*, *Kishinoella tonggol*, *Auxis thazard*, and *Neothunnus macropterus*. Rarely *Katsuwonus pelamis* is also taken.

**Maeda, H. (1962)**M  
8-05399

In 8-05335

Distribution pattern of fish in relation to fishing method, with special reference to that of tuna along longline

Discusses the relation of fishing method to the distribution pattern which also has some close relation to the position in the food-pyramid with a general view of several common scombroids—from small fish such as anchovy to large ones such as marlin.

**De Moraes, M. N. (1962)**M  
8-05400

In 8-05335

Development of the tuna fishery of Brazil, and preliminary analysis of the first three years' data

Since 1957 logs from each vessel fishing have been available, containing information about the date of each fishing trip, the location, the number of hooks used, and the water temperature. The principal ports of disembarking are Recife and Santos, while the regions that they fish are included between the latitudes of 13° N and 30° S, and the longitudes of 2° E and 52° W. Within this area the fishery is concentrated north of 15° S and west of 25° W. The most important contributors to the catches are: *Germo alalunga*, *Neothunnus albacares*, *Parathunnus obesus*, *Istiophorus americanus*, *Xiphias gladius* and *Makaira amplia*.



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- Silas, E. G. & M. S. Rajagopal** (1962) M  
8-05401  
In 8-05335

On the sailfish, and marlins of the Tinnevely coast, gulf of Mannar

Besides the sailfish *Istiophorus gladius*, 3 spp. of marlins have been examined from troll line catches made off Tuticorin. The size composition, food, and maturity of the specimens examined are given along with morphometric data on the specimens.

- Balakrishnan, V.** (1962) M  
8-05402  
In 8-05335

Size composition of *Rastrelliger kanagurta* (Cuvier) occurring at Vizhingam

- Pradhan, L. B. & C. V. G. Reddy** (1962) M  
8-05403  
In 8-05335

Fluctuations in mackerel landings at Calicut in relation to hydrographical factors

- Radhakrishnan, N.** (1962) M  
8-05404  
In 8-05335

Catch analysis of mackerel at Karwar and the nearby centres during the seasons 1956-57, 1957-58, and 1958-59

- Raju, G.** (1962) M  
8-05405  
In 8-05335

An analysis of the catch statistics of the Minicoy tuna fishery

- Thomas, P. T.** (1962) M  
8-05406  
In 8-05335

Size composition of the yellowfin tuna *Neothunnus macropterus* (Temminck and Schlegel) and the oceanic skipjack *Katsuwonus pelamis* (Linnaeus) from the Laccadive Sea around Minicoy

Length frequencies and the relationship between length and weight of the yellowfin tuna, *Neothunnus macropterus*, and the oceanic skipjack *Katsuwonus pelamis* from the catches in Minicoy during the period Nov. 1960-Apr. 1961 are studied. Statistics of the total catch of each sp. during the period, the amount of effort expended and the resultant catch-per-unit of effort are worked out.

- Jones, S. & H. Rosa, Jr.** (1962) M  
8-05407  
In 8-05335

A synopsis of data on the genus *Rastrelliger* Jordan and Starks 1908 with an annotated bibliography

A synopsis enlarging and bringing up to date the one presented by H. R. Jr. at the meeting of the sub-committee on *Rastrelliger* of the Indo-Pacific Fisheries Council held in Malaya in Sep. 1956, is given with an annotated bibliography covering over 200 references.

**Schaefer, M. B. (1962)**M  
8-05408

In 8-05335

Some new trends in investigation of tunas in the Pacific Ocean

A brief history of the research on tunas carried out in the past has been given and lines of study on tunas of the Pacific currently being pursued by research workers discussed.

**Miyamoto, H. (1962)**M  
8-05409

In 8-05335

Summary of studies on tuna resources carried out at Nankai Fisheries Research Laboratory, Japan

An outline of the studies on tuna resources conducted by the laboratory is given along with its programme of work.

**Jones, S. (1962)**M  
8-05410

In 8-05335

Conservation of the tuna and billfish resources of the Indian Ocean

Progressive reduction in size of certain spp. in some of the regularly fished areas is reported. The need for initiating co-ordinated action even before the maximum level of fishing is reached, is pointed out.

**Boeseman, M. (1962)**M  
8-05411

In 8-05335

Scombroid types in the Leiden Museum collection

The type specimens available are listed, mentioning the holotypes, syntypes, lectotypes, paratypes and neotypes. Type localities and brief descriptions of the specimens are given along with photographs of the types.

**Morrow, J. E. (1962)**M  
8-05412

In 8-05335

Marlins, sailfish and spearfish of the Indian Ocean

A review is given. *Istiompax indicus*, *Makaira nigricans*, *Tetrapturus audax*, *Istiophorus gladius* and probably *Tetrapturus angustirostris* occur in the Indian Ocean. The distinguishing characters, size, feeding habits, range of distribution, migrations, spawning seasons and fecundity of all the spp. are described and a key to the identification of adult Istiophoridae of the Indian Ocean is also presented. The phylogenetic relationships of the spp. described are indicated diagrammatically.

**Deraniyagala, P. E. P. (1962)**M  
8-05413

In 62-05335

The large beaked scombroids of Ceylon

A brief review of the billfishes of Ceylon waters is given. The spp. are *Tetrapturus indicus*, *T. tenuirostratus*, *Makaira nigricans*, *M. xantholineata*, *M. mitsukurii*, *Istiophorus gladius*, and *Xiphias gladius*.

- M  
8-05414
- Postel, E.** (1962)  
In 8-05335  
Les thonides d'Afrique du Nord (Tunas of North Africa)

A review is given. The spp. dealt with are *Thunnus thynnus*, *Auxis thazard*, *Sarda sarda*, *Euthynnus alletteratus*, *Germo alalunga* and *Orcynopsis unicolor* and available details on their geographical distribution, migrations, anatomy, development, and catch statistics are also included.

- M  
8-05415
- Banerji, S. K.** (1962)  
In 8-05335

Some considerations in the study of pelagic fish stocks with special reference to Indian mackerel

The limitations in respect of the vital rates from the statistics of commercial catch of pelagic fisheries are discussed.

- M  
8-05416
- Jonklaas, R.** (1962)  
In 8-05335

Scombroid fishes and fisheries of the Maldiv Islands with special reference to the tuna fishery

*Auxis thazard*, *Katsuwonus pelamis*, *Euthynnus affinis*, *Neothunnus macropterus*, *Gymnosarda nuda*, *Acanthocybium solandri*, *Makaira indica* and *Histiophorus gladius* were observed by the author enabling drawing up of short accounts of the habitat of these fishes as well as their relative importance in the fishing industry of Maldives.

- M  
8-05417
- Mimura, K.** (1962)  
In 8-05335

Present status of the tuna longline fishing in Indian Ocean

The present status of the Japanese tuna longline fishing in Indian Ocean is discussed based on the data for 1959.

- M  
8-05418
- Aslanova, N. E.** (1961)  
*Hidrobiol., Bucharest*, (3) : 115-32

Mechenie promyslovykh ryb s tsel'iu izucheniia ikh migratsii i drugikh storon biologii (Tagging of fishes for the study of their migration and other biological factors). Ro

- M  
8-05419
- Maiorova, A. A.** (1961)  
*Hidrobiol., Bucharest*, (3) : 213-24

Kolebaniia chislennosti osnovnykh promyslovykh ryb Chernogo moria (The fluctuations of the quantity of the basic spp. of fish in the Black Sea). Ro

- Zusser, S. G.** (1961) M  
8-05420  
*Hidrobiol., Bucharest*, (3) : 377-89  
Izuchenie prichin sutochnykh vertikal'nykh migratsii planktonoiadnykh chernomorskikh ryb (Study of the causes of vertical migration of plankton feeding fishes of the Black Sea). Ro
- Film** (1962) M  
8-05421  
Alaska Department of Fish and Game—Subport Building, Juneau, Alaska  
The sea lion  
16 mm, colour, sound, 20 min.
- Bjerknes, J.** (1961) M  
8-05422  
*Bol. Comp. adm. Guano*, 37 (9) : 8-13  
Estudio del niño basado en el análisis de las temperaturas de la superficie del océano de 1935-57 (Study of the niño based on the analysis of temperatures of the ocean surface from 1935 to 57)
- Bjerknes, J.** (1961) M  
8-05423  
*Bol. Comp. adm. Guano*, 37 (10) : 9-16  
Estudio de 'el niño' basado en el análisis de la temperatura de la superficie del océano de 1935-57 (Study of the niño based on the analysis of temperatures of the ocean surface from 1935 to 57)  
Co 8-05422.
- Mellinger, J.** (1962) M  
8-05424  
*C.R. Acad. Sci., Paris*, 255 (18) : 2294-8  
Cytologie hypophysaire de *Scyliorhinus caniculus* (L.) et d'autres poissons élasmobranches. Microscopie optique et microscopie électronique (Hypophysial cytology of *Scyliorhinus caniculus* (L.) and other elasmobranch fishes. Optic and electronic microscopy)  
Preliminary note of observations on *S. caniculus*, *S. stellatis*, *Raja elevata*, *Torpedo marmorata*.
- Iakovenko, M. Ia.** (1961) M  
8-05425  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 192-8  
Metodika opredeleniia vozrasta belomorskogo lysuna v sviazi s opredeleniem norm ego promysla (Method of determining the age of the White Sea harp seal, in connexion with determining catch level)  
*Pagophilus groenlandica*.
- Kotov, V. L.** (1961) M  
8-05426  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 14-7  
Sostoianie i zadachi regulirovaniia promysla morskikh mlekopitaiushchikh (Present state and tasks in regulation of sea mammal hunting)  
Catch figures and prohibitions at present in force.



- M  
8-05427
- Barabash-Nikiforov, I. I.** (1961)  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 218-21  
 K probleme akklimatizatsii kalana na Murmane (The problem of acclimating the sea otter on Murman)

Proposal to introduce *Enhydra lutris* to Barents Sea.

- M  
8-05428
- Kondakov, N. N.** (1961)  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 211-3  
 K sistematike Baikalskogo tiulenia (Systematics of the Baikal seal)

*Pusa sibirica.*

- M  
8-05429
- Arsen'yev, V. A.** (1961)\*  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 112-24  
 Rasprostraneniye kitov v Beringovom more i vozmozhnosti razvitiia kitovoinogo promysla (Distribution of whales in the Bering Sea and possibilities of developing a whaling industry)

- M  
8-05430
- Betesheva, E. I.** (1961)\*  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 104-11  
 Pitaniye promyslovyykh kitov Kuril'skogo raiona (Food of industrial whales of the Kuril region)

- M  
8-05431
- Berzin, A. A.** (1961)  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 94-103  
 Materialy po razvitiyu zubov i opredeleniyu vozrasta kashalota (Tooth development and age determination of the cachalot)

*Physeter catodon.*

- M  
8-05432
- Ivanova, Ee. I.** (1961)\*  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 72-8  
 Proportsii tela i kharakter rosta kitov dal'nego vostoka (Body proportions and growth characteristics of whales of the Far East)

- M  
8-05433
- Zemskiy, V. A.** (1961)\*  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 60-7  
 O prodolzhitel'nosti zhizni finvalov i periodike ikh razmnnozheniia (Longevity of fin whales and their periods of fecundity)

- M  
8-05434
- Surkov, S. S.** (1961)\*  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 18-22  
 Istoriia i sovremennyye zadachi izucheniia morskikh mlekopitaiushchikh na severe (History and present tasks in study of marine mammals in the north)

- M  
8-05435
- Tikhomirov, E. A.** (1961)  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 199-210  
 Raspredelenie i migratsii tiulenei v vodakh dal'nego vostoka (Distribution and migrations of seals in waters of the Far East)

Mainly in sea of Okhotsk.

- M  
8-05436
- Delyamure, S. L.** (1961)  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 222-32  
 O neobkhodimosti vsestoronne i sistematicheski issledovat' parazitov promyslovyykh morskikh mlekopitaiushchikh (Necessity for thorough and systematic study of parasites of commercial sea mammals)

List of parasites found in whales and seals.

- M  
8-05437
- Nikolaeev, A. M.** (1961)  
*Trud. Soveshch. ikhtiol. Kom.*, (12) : 214-7  
 O rasprostraneni, chislennosti i biologii kalanov (Distribution, numbers and biology of the sea otter)

*Enhydra lutris* in North Pacific.

- M  
8-05438
- Strelkov, Iu. A.** (1960)\*  
*Trud. zool. Inst. Akad. Nauk SSSR*, 28 : 147-96  
 Endoparaziticheskiye chervi morskikh ryb vostochnoi Kamchatki (Endoparasitic worms of sea fishes of eastern Kamchatka)

- M  
8-05439
- Galkina, L. A.** (1961)\*  
*Probl. Sev. (En Transl.)*, 4 : 108-20  
 Osobennosti razmnzheniia i rannikh etapov razvitiia sel'di v severnykh raionakh Okhotskogo moria (Features of the reproduction and early stages of the development of herring in the northern parts of the sea of Okhotsk)

- M  
8-05440
- Scheffer, V. B.** (1961)  
*N. Amer. Fauna*, (64) : 206 p.  
 Pelage and surface topography of the northern fur seal

*Callorhinus ursinus*.

- M  
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- Vasil'ev, L. I.** (1961)  
*Probl. Sev. (En Transl.)*, (4) : 121-30  
 O sel'di Pechorskoi guby i prilegaiushchikh k nei raionov (oчерk biologii i perspektiv promysla) (The herring of Pechorskaia Guba and adjacent regions—biological outline and commercial prospects)

Mouth of Pechora, Barents Sea.

- M  
8-05442
- Sergeant, D. E. (1961)\***  
*Arct. Circ.*, 7 : 28 p.  
 Whales and dolphins of the Canadian east coast  
 Guide for observer at sea and in air with plotting sheets.
- M  
8-05443
- New Jersey. Division of Shell Fisheries (1961)\***  
 Trenton, 11 p.  
 Our friend the oyster  
 Notes on oyster culture.
- M  
8-05444
- Friedman, L. Rosenbloom (1962)\***  
 Thesis, New York University, 100 p.  
 A study of normal and malignant thymus tissue of the teleost *Astyanax mexicanus* in tissue culture
- M  
8-05445
- Santiago Carrara, I. (1960)**  
 La Plata, Facultad de Ciencias Veterinarias, Universidad Nacional de la Plata, 5 p.  
*Trifur tortuosus* Wilson. copepodo parasito de *Merluccius hubbsi* Marini (*Trifur tortuosus* Wilson, parasitic copepod of *Merluccius hubbsi* Marini)
- M  
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- McCann, C. (1961)**  
*Dom. Mus. Rec. Zool., Wellington*, 4 (3) : 21-7  
 The occurrence of the southern bottle-nosed whale, *Hyperoodon planifrons* Flower, in New Zealand waters  
 Two records only.
- M  
8-05447
- Santiago Carrara, I. (1959)\***  
 La Plata, 10 p.  
 El abadejo o bacalao del sur (*G. blacodes* Gunther 1862) y dos de sus entoparasitos (The codfish or hake from the south (*G. blacodes* Gunther 1862) and two of its endoparasites)
- M  
8-05448
- Karlsen, K. (1962)\***  
*Hvalrâd. Skr.*, (45) : 56 p.  
 Development of tooth germs and adjacent structures in the whalebone whale (*Balaenoptera physalus* (L.)) with a contribution to the theories of the mammalian dentition
- M  
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- Spp. collected in Southern Ocean, 1957-58.
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- En 1950, Kaganovskaia, S. M.
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- M  
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- Tambovtsev, B. M.** (U.K. MAFF, Transl.) (1962)  
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- En 59-0197.
- M  
8-05454
- Vilson, A.** (U.K. MAFF, Transl.) (1962)  
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*Rep. Lab. Fish. Biol. Taiwan Fish. Res. Inst.*, (12) : 16 p.  
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- M  
8-05456
- Dmitriev, N. A.** (Israel Program for Scientific Translations, Jerusalem, Transl.) (1962)  
 Jerusalem, 8 p.  
 Biological differences and similarities between the White Sea herring and the Baltic herring
- En 59-0020. Available from the Office of Technical Services, Washington, D.C.



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**Leloup, E.** (Ed.) (1960?)\*  
Ostend, Belgium, 89 p.

Recherches sur l'ostréiculture dans le bassin de chasse d'Ostende en 1960  
(Oyster breeding in the Ostend hunting basin)

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**Svetovidov, A. N.** (Israel Program for Scientific Translations,  
Jerusalem, Transl.) (1962)  
OTS 61-31042

Similarities and differences in the distribution, ecology and some other characteristics of cod and oceanic herring

*En* 1944, Svetovidov, A. N. Available from the Office of Technical Services,  
Washington, D.C.

M  
8-05459

**Toom, M. M.** (Israel Program for Scientific Translations,  
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OTS 61-31040

Experiments in the incubation of Baltic herring eggs

*En* 59-0004. Available from the Office of Technical Services, Washington,  
D.C.

M  
8-05460

**Galkina, L.** (Israel Program for Scientific Translations,  
Jerusalem, Transl.) (1962)  
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Effect of salinity on the sperm, eggs and larvae of the Okhotsk herring

*En* 582901. Available from the Office of Technical Services, Washington,  
D.C.

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**Stander, G.** (1962)\*  
*Invest. Rep. S.W. Afr. Mar. Res. Lab.*, (5) : 63 p.

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**Jones, W. G. & G. Y. Harry, Jr.** (1961)  
*Res. Briefs*, 8 (1) : 14-30

The Oregon trawl fishery for mink food—1948-1957

Reviews history of this fishery, giving statistics of catches and length  
distribution, especially for *Atheresthes*, *Parophrys*, *Eopsetta* and *Microstomus*  
which are caught competitively for human food also. Effects of regulations  
governing mesh sizes and % and sizes of valuable species in landings, economic  
and operational consequences of lower prices for mink food than for human  
food, especially on range of vessels from transport, and consequent intense  
exploitation of new grounds for small fish.

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 Occurrence of the California halibut in Oregon waters  
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 Le dispositif d'accrochage des oeufs de *Sepia elegans* sur *Alcyonium palmatum* (The sticking device of the eggs of *Sepia elegans* on *Alcyonium palmatum*)
- Torchio, M.** (1960) M  
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*Biología pesquera*, (1) : 32 p.  
 Investigaciones biometricas en la merluza *Merluccius gayi gayi* de la costa central de Chile (Biometric investigations of the hake *Merluccius gayi gayi* in the central coast of Chile)
- Lunz, G. R. et al.** (1961)\* M  
8-05468  
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 The destruction of small fish by the shrimp trawlers in Pamlico Sound, North Carolina. A report to the Chesapeake and South Atlantic sections, Atlantic States Marine Fisheries Commission
- Anon.** (1962) M  
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*Caribbean*, 2 (1) : 6  
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**Taguchi, K.** (1961)  
*Bull. Jap. Soc. sci. Fish.*, 27 (11) : 972-8

(A trial to estimate the instantaneous rate of natural mortality of adult salmon (*Oncorhynchus* sp.) and the consideration of rationality of offshore fishing. 2. For red salmon (*Oncorhynchus nerka*) 1961). *Ni* En

Co 8-09400. Application of methods of previous paper to this second species of salmon.

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**Ohshima, Y. & S. Choe** (1961)  
*Bull. Jap. Soc. sci. Fish.*, 27 (11) : 979-86  
(On the rearing of young cuttlefish and squid). *Ni* En

Report of feeding habits, growth, swimming, and survival of fry of *Sepia esculenta*, *S. subaculeata* and *Sepiella maindroni*, reared in tanks with running water.

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Note on progress of tuna prospecting off south-west corner of Australia

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Describes areas of distribution, fishing and handling methods of *Palinurus vulgaris*, *Panulirus regius*, *Palinurus mauritanicus*, *Jasus lalandei*, *Panulirus argus*, *P. laeviscauda*, *P. guttatus*, and the development of the fisheries of the three first spp. listed. Gives information on present status of the French spiny lobster fisheries.

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 (On the blue-green pigments in the scales of certain fishes)
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- Fertilizability of the eggs under different salinities and examination of the mobility of sperms under these conditions. Co 62-05048, Ci 62-00942.
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- Summarizes the known data relating to *Dermocystidium marinum*, and the disease of oysters caused by it.

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Records occurrence and discusses osteological and body measurement. Comparison between this and an immature and adult specimen.

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Downstream migration of young pink salmon (*Oncorhynchus gorbuscha* Walbaum) in the rivers of Sakhalin

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Ci 61-09280. Co 8-05526.

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Report of plans to establish a commercial trout farm in Tasmanian marine waters, using method developed in Norway.

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(Studies on the ecology, growth and metamorphosis in conger eel, *Conger myriaster* (Brevoort)). Ni En

Analysis of growth as exhibited by individuals sampled from natural population, especial care being taken about population identity; relative growth of body parts is described in detail and considered in relation to gonad changes.

**Heegaard, P.** (1962)

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Parasitic Copepoda from Australian waters

Report on 47 spp. of which 32 are new, and one is undescribed (noted from literature); 6 new genera are erected. Locality is reported, and ill. morphological description given for each species, generally for both male and female.

**Jones, S.** (1962)

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*In* 8-05335

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On the introduction of *Tilapia mossambica* (Peters) as a tuna live-bait in the island of Minicoy in the Indian Ocean

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Stomach analyses of large numbers of pike from three lakes show that salmonids form the main prey, but perch and other fish are also taken.

**Ellison, M. F.** (1961)

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*Proc. Lpool Nat. Fld Cl.*, (1960), 22

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The coypu in Lancashire

Four records of this fur-farm escape from the Hawkshead area of north Lancashire.

**Dépêche, J.** (1962)

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*C.R. Acad. Sci., Paris*, 255 (20) : 2670-2

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Le développement *in vitro* des oeufs de Poeciliidae (Cyprinodontes vivipares) (The development *in vitro* of Poeciliidae eggs (Cyprinodontes vivipares))

Preliminary note giving results of experiments with *Lebistes*, *Xiphophorus* and *Mollienesia*.



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Preliminary note on reporting histological observations in *Gnathonemus numenius*.

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Preliminary note reporting results of electrophysiological observations; remarks on the part played by electric fields in the location of objects.

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*C.R. Acad. Sci., Paris*, 255 (16) : 1997-8  
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 Cytologie de l'hypophyse du cyprin (*Carassius auratus* L.) (Cytology of the hypophysis of the cyprinid (*Carassius auratus* L.))

Preliminary note indicating the presence of five types of chromophiles.

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 Some morphological characters of trout from lake Mavrovo and the river Radika

En 1955, Sidorovski, M. Available from the Office of Technical Services, Washington, D.C.

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 Irish sea trout, a review of investigations to date

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 Unusual white sturgeon diet

*Acipenser transmontanus* caught in Willamette River May 1956 had in stomach *Salmo gairdneri* and small *Oncorhynchus tshawytscha*.

**Faktorovich, K. A. (1959)**F  
8-05543*In* Trudy soveshchaniia po fiziologii ryb, 237-43

O narushenii zhirovogo obmena v pecheni raduzhnoi foreli pri vyrashchivanii na iskusstvennykh kormakh (Disorders in fat metabolism of the liver in rainbow trout bred on artificial feeds)

Shifting from natural diet to artificial one results in considerable metabolic changes, especially changes in fatty metabolism. Deficient foods bring about fatty dystrophy of the liver and a number of concomitant pathological occurrences. Rational change in food regimen reverses the pathological process and brings about regeneration of liver and recuperation of fish.

**Faktorovich, K. A. (1962)**F  
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Disorders in fat metabolism of the liver in rainbow trout bred on artificial feeds

*En* 8-05543. Available from the Office of Technical Services, Washington, D.C.**Lom, J. & J. Vavra (1961)\***F  
8-05545*Wiad. Parazyt.*, 7 (4/6) : 828-32(Some results of investigations of the ultrastructure of spores of the fish parasite *Plistophora hypheobryconis* (Microsporidia) ). Ru**Lom, J. & J. Vavra (1962)**F  
8-05546

4 p.

Some results of investigations of the ultrastructure of spores of the fish parasite *Plistophora hypheobryconis* (Microsporidia)*En* 8-05545. Available from Associated Technical Services, Inc., East Orange, New Jersey.**Feider, Z. et al. (1960)**F  
8-05547*Anal. stiint. Univ. Iasi (Stiinte nat.)*, 6 (1) : 97-122Suprafața branhială la păstrăv (*Salmo trutta labrax* m. fario (L.) 1768) (The branchial surface of the common trout—*Salmo trutta labrax* m. fario (L.) 1768). Ro Ru Fr

Study of branchial surface in 1 juvenile, 1 male and 5 females.

**Vibert, R. (1961)**F  
8-05548*Cah. Ing. agron.*, 160 : 9-20

Les améliorations piscicoles en liaison avec la mise en valeur agricole (Fisheries improvement in connection with agricultural utilization)

Lecture on the role of fishculture on soil utilization and improvement of diets.

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- Nakamura, K.** (1962)  
*Bull. Freshw. Fish. Res. Lab., Tokyo*, 11 (3) : 1-226  
(Studies on the increase of fish culture products). Ni En

Examination of mortality among eggs and fry caused by *Saprolegnia*, use of chemicals against fungal infection, sunlight, turbidity, dessication, cannibalism, and agricultural chemicals and fertilizers, and experiments with measures to increase survival.

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*Bull. Jap. Soc. sci. Fish.*, 27 (11) : 958-62

(A study on the phenomenon of the tobi-koi or shoot carp—4. Effects of adding a small number of larger individuals to the experimental batches of carp fry and of culture density upon the occurrence of shoot carp). Ni En

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8-05551
- Konishi, J.** (1961)  
*J. Fac. Fish. Univ. Mie*, 5 (2) : 98-189  
(Physiological studies on the visual center in fish). Ni En

Experimental analysis of photoreception in fish, especially of the central mechanism of vision, using *Carassius* and *Anguilla* as experimental material. Responses to light flash were recorded from the tectum opticum. The components of the evoked potential were analysed by various methods.

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8-05552
- Qudrat-i-Khuda, M., H. N. De & N. M. Khan** (1962)  
*Pakistan J. sci. industr. Res.*, 5 (1) : 20-3

Biochemical and nutritional studies on East Pakistan fish. Pt. 5. Influence of age of fish on the distribution of protein in their body

Co 62-04866, Ci 61-09303, Ci 61-07628, Ci 61-06763. Estimate of total N and non-protein N in meat of *Labeo rohita*, *L. calbaus*, and *Cirrhina mrigala* at two stages of growth and discussion in light of protein nutrition in young.

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8-05553
- Kawamoto, N. Y.** (1960)  
*Rep. Fac. Fish. Univ. Mie*, 3 (3) : 553-64

On the form and size of the swimbladder of goldfish (*Carassius auratus* L.) in special reference to its body equilibrium

Observations, by X-ray, of form and size of swimbladders and structure of body cavity and experimental study of effect of temperature and salinity, removal of gases by vacuum pump and exclusion of the caudal neurosecretory system, on size and form of swimbladder.

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*Rep. Fac. Fish. Univ. Mie*, 3 (3) : 641-8  
(Fundamental studies on fish farming food. (1)). Ni En

Test, in terms of survival and growth, of various foodstuffs.

- Giroud, P., M. Capponi & N. Dumas** (1962) F  
8-05555  
*C.R. Acad. Sci., Paris*, 255 (13) : 1537-9

Les poissons sont témoins d'affections dues à *R. burneti* évoluant sur des hommes ou des animaux (Fishes as evidence of diseases produced by *R. burneti* developing in men or animals)

Tests carried out with *Tilapia nilotica*, *Barbus altialanis*.

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8-05556  
*Zool. Mag. Tokyo*, 71 (5) : 187

(Changes in the responsiveness of melanophore during embryonic development of *Salmo irideus*). *Ni En*

Changes in response to A.C. and to K<sup>+</sup>.

- Inouye, K. & S. Noto** (1962) F  
8-05557  
*Zool. Mag. Tokyo*, 71 (5) : 188

(Structure of the retina in *Anableps* (four-eyed fish)). *Ni En*

Histological section of eye.

- Yanni Hanna, M.** (1962) F  
8-05558  
*Z. vergl. Physiol.*, 45 (3) : 315-21

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 Kolichestvennoe razvitie fitoplanktona v vodakh N'iufaundlenskoi banki, Flemish-Kapa i prilozhashchei akvatorii (Quantitative development of phytoplankton in Newfoundland and Flemish Cap areas and in adjacent waters in April-May, 1958). En
- Serebriakov, V. P.** (1962) M  
8-06156  
*In* 8-06015 : 227-33  
 K izucheniiu ikhtyoplanktona raionov N'iufaundlenda i Labradora (Some notes on Ichthyoplankton of Newfoundland and Labrador areas). En
- Hardy, M. G.** (1962) M  
8-06157  
*Nature, Lond.*, 196 (4856) : 790  
 Photophore and eye movement in the euphausiid *Meganectiphanes norvegica* (G. O. Sars)
- Petrova, V. I.** (1960) M  
8-06158  
*Trud. nauch.-izsled. Inst. Rib. Prom. Varna*, 2 : 73-84  
 Kolichestveni promeni i "tsuftezh" na *Rhizosolenia calcar avis* Schul. v Chernom more pred bulgarskii breg prez 1954-1956 g. (Quantitative changes and "glowering" of *Rhizosolenia calcar avis* Schul. off the Bulgarian coast during the years 1954-1956). Bu De

- Dimov, I. G.** (1960) M  
8-06159  
*Trud. nauch.-izsled. Inst. Rib. Prom. Varna*, 2 : 85-147  
 Zooplanktonut v Cherno more pred bulgarskiia briag prez 1954. 1955 i 1956 g. (The zooplankton of the Black Sea off the Bulgarian coast during the years 1954-1956)
- Koblents-Mishke, O. I.** (1961)\* M  
8-06160  
*Okeanologiya*, 1 (1) : 95-106  
 Sovremennoe sostoianie izuchenia pervichnoi produktsii okeana (The present status of knowledge concerning the primary production of the ocean)
- Koblents-Mishke, O. I.** (1962?) M  
8-06161  
 Trans. 147—U.S. Navy Hydrographic Office, 28 p.  
 (The present status of knowledge concerning the primary production of the ocean)
- SFA 7 (3) 5198. En 8-06160. Comprehensive summary of development and present status of the Soviet and foreign investigations. Methods used such as oxygen, radio carbon, and chlorophyll are analyzed, pointing out their advantages and limitations. Significance and nature of photosynthesis in production process is analyzed. Relationship between lighting conditions and quantity of production is determined, indicating the significance of mineral particles, phytoplankton and zooplankton in the vegetation process.
- Senta, T.** (1961) M  
8-06162  
*Jap. J. Ecol.*, 11 (6) : 221-3  
 On the relations between the numbers of eggs, the larvae of fishes and the volume of plankton collected simultaneously with the larval net  
 SFA 7 (3) 5208.
- Schwarz, S.** (1961) M  
8-06163  
*Z. Fisch.*, 10 (4/5) : 361-74  
 Schichtung des Zooplanktons im Küsten- und Boddengebiet Rügens (The zooplankton layers in the coastal region and in the Bodden near Rügen). En Ru
- Waldmann, J.** (1959) M  
8-06164  
*Z. Fisch.*, 8 (7/8) : 557-64  
 Zooplanktonuntersuchungen in der Wismarschen Bucht (Investigations of zooplankton in the bay of Wismar). En Ru  
 Relatively poor in species.
- Backus, R. H., C. S. Yentsch & A. Wing** (1961) M  
8-06165  
*Nature, Lond.*, 192 (4802) : 518-21  
 Bioluminescence in the surface waters of the sea  
 Ci 59-6670; 60-0201; 60-3412; 61-06953; 61-08532. Describes new instruments and compares results obtained with previous literature.



- Knight-Jones, E. W. & S. Z. Quasim** (1959) M  
8-06166  
*Proc. Indian Sci. Congr. Ass.*, (46) (3) : 376

Effects of pressure pulses on the behaviour of some plankton animals

Abstract only. Ctenophore *Pleurobrachia pileus* treats a positive pulse as an increase in pressure, responding by swimming upwards. Cyprid larvae of *Balanus balanoides* respond to a positive pulse, as to a decrease in pressure, by embarking on a long period of inactivity, during which they sink passively. Issued also as: *Contr. Mar. Biol. Univ. Wales*.

- Fagetti, E. G.** (1962) MF  
8-06167  
*Gayana (Zool.)*, (4) : 59 p.

Catálogo de los copépodos planctónicos chilenos (Catalogue of Chilean planktonic copepods)

List of spp. by families, with distribution; bibliography.

- Lillelund, K.** (1960) MF  
8-06168  
*Z. Fisch.*, 9 (5/6) : 365-406

Der Sehlendorfer Binnensee (1-6). Limnologische und fischereibiologische Untersuchung eines Strandgewässers an der deutschen Ostseeküste. 3. Das Netzplankton des Sehlendorfer Binnensees (The Sehlendorfer inland lake. 1-6. Limnological and biological investigations of a brackish water lake on the Baltic coast. 3. Plankton layers of the Sehlendorfer inland lake). En Ru

Co 8-06114. Notes on time and methods of investigations; qualitative composition; horizontal distribution; plankton development in different period and under different water conditions.

- Kuhn, H.** (1959)\* F  
8-06169  
*Mikrokosmos*, 48 : 129-33

Das Netzplankton des Zürichsee im Wechsel der Jahreszeiten (The net plankton of the lake of Zürich during the change of seasons)

- Bekman, M. Iu.** (1959)\* F  
8-06170  
*Trav. Sta. limnol. Lac Bajkal*, 17 : 342-81

(Some rules in the distribution and mass appearance of planktonic species in the Baikal Sea). Ru

- Koriakov, E. A.** (1959)\* F  
8-06171  
*Trav. Sta. limnol. Lac Bajkal*, 17 : 313-41

(On the problem of the distribution of some pelagic inhabitants of the Baikal and of the northern part of the sea). Ru

- Vilisova, I. K.** (1959)\* F  
8-06172  
*Trav. Sta. limnol. Lac Bajkal*, 17 : 275-304  
(Zooplankton of the Baikal Sea). Ru

- F  
8-06173
- Williams, E. A.** (1962)  
*Nature, Lond.*, 196 (4849) : 90  
 Branched and multiple forms of *Euglena gracilis*
- F  
8-06174
- Fryer, G.** (1962)  
*Nature, Lond.*, 195 (4836) : 97  
 Secretions of the labral and trunk limb glands in the cladoceran *Eurycercus lamellatus*
- F  
8-06175
- Slater, J. V. & W. Tremor** (1962)  
*Biol. Bull., Woods Hole*, 122 (2) : 298-309  
 Radioactive phosphorus accumulation and distribution in *Tetrahymena*  
 Investigates  $P^{32}$  uptake in mass populations of the individual mating types of the protozoan, *Tetrahymena pyriformis*
- F  
8-06176
- Sládečková, A. & V. Sládeček** (1960)  
*Sborn. vys. Šk. chem.-technol. Praha*, 4 (1) : 487-510  
 Spring plankton of some impounding reservoirs in east Bohemia. De  
 WPA 35 (9) 1732.
- F  
8-06177
- Myklebust, R. J. & F. C. Harmston** (1962)  
*J. Wat. Poll. Contr. Fed.*, 34 : 302-6  
 Mosquito production in stabilization ponds  
 WPA 35 (9) 1800.
- F  
8-06178
- Barthelmes, D.** (1960)  
*Z. Fisch.*, 9 (5/6) : 333-52  
 Die horizontale Zooplanktonverteilung im Grossen Müggelsee. 1. Einige Beobachtungen über die Verhältnisse im Eulimnion (The horizontal distribution of zooplankton in the Grosse Müggelsee. 1. Some observations of the eulimnion). En Ru
- F  
8-06179
- Borutskii, E. V.** (1962)  
*Dokl. Akad. Nauk SSSR*, 147 (6) : 1499-502  
 Pervoe nakhozhdenie troglobionta iz Calanoida (Crustacea, Copepoda) v podzemnykh vodakh (The first discovery of a troglobiont from the Calanoida in subterranean waters)
- FG  
8-06180
- Shaw, R. F. & B. L. Bercaw** (1962)  
*Nature, Lond.*, 196 (4853) : 454-7  
 Temperature and life-span in poikilothermous animals  
 Theoretical study, incl. application to data for *Daphnia*.

# BENTHOS

# BENTHOS

**Mordukhai-Boltovskoi, F. D. (1959)\***

M  
8-06181

*Bull. Soc. Nat. Moscou*, 64 : 141-3

Some data on the rate of species formation in marine fauna

**Monniot, F. (1962)**

M  
8-06182

*C.R. Acad. Sci., Paris*, 255 (21) : 2820-2

*DEXTROGASTER SUECICA* n.g., n.sp., Ascidie interstitielle des graviers du Skagerrak (*DEXTROGASTER SUECICA* n.g., n.sp., an interstitial ascidian from the Skagerrak gravels)

Preliminary note describing the sp. with diagnosis of the genus.

**Breton, E. (1959)\***

M  
8-06183

*Bull. Soc. sci. Bretagne*, 34 (1-2) : 33-44

Contribution à la faunistique des biotopes aquatiques restreints (Contribution to the faunistics of restricted aquatic biotopes)

**Serbănescu, O. (1959)\***

M  
8-06184

*Natura, Bucuresti*, 11 (5) : 133-6

The action of the 1957-1958 winter frost on the coast fauna in the Rumanian waters of the Black Sea

**Nörvang, A. (1959)**

M  
8-06185

*Vidensk. Medd. dansk naturh. Foren. Kbh*, 120 : 25-41

*ISLANDIELLA* n.g. and *Cassidulina* d'Orbigny

Gives a revision of the genera and presents a figure of the type spp. of *Cassidulina*, *C. laevigata* d'Orbigny from Herdla near Bergen. *C. crassa* d'Orbigny is recorded from Salhus, just north of Bergen.

**Hofer, H. (1959)**

M  
8-06186

*Zool. Jb.*, 77 : 465-90

Über das Infundibularorgan und den Reissnerschen Faden von *Branchiostoma lanceolatum* (On the infundibular organ and Reissner's fibre in *Branchiostoma lanceolatum*)

Material for this investigation was collected at the Biological Station Espegrend in Norway.

**Jorde, I. & N. Klavestad (1959)\***

M  
8-06187

*Nytt Mag. Bot.*, 7 : 145-56

Observations on *Ectocarpus*, *Feldmannia*, *Pylaiella* and *Stictyosiphon* in Hardangerfjord

**Jorde, J. & N. Klavestad (1959)\***

M  
8-06188

*Nytt Mag. Bot.*, 8 : 89-102

On the Sphacelariales of a fjord area in west Norway

M

**Printz, H.** (1959)

8-06189

*Avh. norske VidenskAkad.*, (3) : 1-15Investigations of the failure of recuperation and repopulation in cropped *Ascophyllum* areas

In many localities where *Ascophyllum nodosum* has been heavily exploited regrowth has failed to appear and no new population has immigrated, even after a lapse of several years.

M

**Printz, H.** (1959)

8-06190

*Avh. norske VidenskAkad.*, (4) : 1-28Phenological studies of marine algae along the Norwegian coast. 1. *Ascophyllum nodosum* (L.) le Jol. 2. *Fucus vesiculosus* L.

Investigates *Ascophyllum nodosum* from different parts of the long Norwegian coast.

M

**Busnek, R.-G. & A. Dziedzic** (1962)

8-06191

*Cah. océanogr.*, 14 (5) : 293-322

Rythme du bruit de fond de la mer à proximité des côtes et relations avec l'activité acoustique des populations d'un cirripède fixé immergé (Rhythm of the ambient seabottom noise in vicinity of the coasts and its relation to the acoustic activities of a population of a fixed immersed Cirripectia)

Survey made during 1959, 1960 and 1961 in the western Mediterranean, near the Corsica and Balearic Islands, based on hydrophonic records of field and aquarium observations.

M

**Bidder, A. M.** (1962)

8-06192

*Nature, Lond.*, 196 (4853) : 451-4Use of the tentacles, swimming and buoyancy control in the pearly *Nautilus*

West Pacific observations in living *Nautilus macromphalus* Sowerby, also made on a specimen of *Nautilus pompilius* L.

M

**Wilt, F. H. & T. Hultin** (1962)

8-06193

*Biochem. biophys. Res. Commun.*, 9 (4) : 313-7

Stimulation of phenylalanine incorporation by polyuridylic acid in homogenates of sea urchin eggs

Demonstrates that poly Ull can stimulate incorporation of phenylalanine by homogenates of *Psammechinus miliaris* eggs, both before and after fertilization.

M

**Keen, A. M.** (1962)\*

8-06194

*Pacif. Nat.*, 3 (9) : 321-8

A new west Mexican subgenus and new species of Montacutidae (Mollusca: Pelecypoda), with a list of Mollusca from Bahia de San Quintin



- Chamberlain, N. A.** (1962) MF  
8-06195  
Thesis, Johns Hopkins University, 47 p.  
Ecological studies of the larval development of *Rhithropanopeus harrisi* (Xanthidae, Brachyura)

Larvae successfully reared in isolation in laboratory using copepod nauplii as sole food source. Laboratory cultures used to examine environmental effects, especially of salinity and temperature, on development and mortality of larvae. Tracer technique using rhodamine B and fluorometers employed in the estimation of exchange of water between small embayment containing a natural population, and outside areas in Chesapeake Bay. By taking daily plankton samples during first few weeks of spawning season, development of larvae spawned at same time was followed. Issued also as: *Tech. Rep. Chesapeake Bay Inst.*, (28).

- Emerson, W. K. & A. D'Attilio** (1962)\* M  
8-06196  
*Amer. Mus. Novit.*, (2108) : 7-8  
Remarks on *Triton ranzani* Bianconi (Mollusca, Gastropoda)

- Frei, E. & R. D. Preston** (1962) M  
8-06197  
*Nature, Lond.*, 196 (4850) : 130-4  
Configuration of alginic acid in marine brown algae

- Lavine, L. S. & H. D. Isenberg** (1962) M  
8-06198  
*Nature, Lond.*, 196 (4849) : 78  
Intracellular calcification in a coccolithophorid

*Hymenomonas* sp., a euryhaline coccolithophorid chrysomonad, was raised axenically in a chemically defined medium containing lactic acid, modified by raising the concentration of magnesium, calcium, phosphate and adding carbonate and 10 mg per cent ethylenediamine tetraacetic acid.

- Gabbut, P. D.** (1962) M  
8-06199  
*Nature, Lond.*, 196 (4849) : 87-8  
'Nests' of the marine false-scorpion

During period 9-15 Apr. 1962, large numbers of *Neobisium maritimum* (Leach) collected at two places in the Isle of Man.

- Bang, F. B.** (1962) M  
8-06200  
*Nature, Lond.*, 196 (4849) : 88  
Serological aspects of immunity in invertebrates

During the summer 1961 at Station Biologique de Roscoff, examined responses of marine worm, *Sipunculus nudus*, and spider crab, *Maia squinado*, to a marine protozoan parasite, *Anophyrus sarcophaga*. This ciliate is a natural parasite of the shore crab, *Carcinus*, reaches high density in the host blood, and eats the amoebocytes.

M  
8-06201**Kay, E. A.** (1962)*Nature, Lond.*, 195 (4836) : 96-7

A bivalved gastropod from the Hawaiian Islands

Records the first living specimen of *Caulerpa racemosa* var. *turbinata* (J. Ag.) Eubank of the sub-family Bertheliminae to be described from a Pacific island.

M  
8-06202**Brown, A. C. & L. G. W. Turner** (1962)*Nature, Lond.*, 195 (4836) : 98-9Expansion of the foot in *Bullia* (Gastropoda)

Studies the mechanism of foot expansion in *Bullia digitalis* from southern Africa.

M  
8-06203**Nizamuddin, M.** (1962)*Bot. mar.*, 4 (3/4) : 191-203

Classification and the distribution of the Fucales. Fr De

Gives identification key to the families ; establishes and describes Seirococcaceae fam. nov., Phyllosporideae Schmidt and Seirococcoideae sub-fam. nov. Systematic position of different genera and their distribution are described.

M  
8-06204**Glendenning, K. A.** (1962)*Bot. Mar.*, 4 (3/4) : 204-18

Determination of fresh weight, solids, ash and equilibrium moisture in *Macrocystis pyrifera*. De

M  
8-06205**Huvé, H.** (1962)*Bot. Mar.*, 4 (3/4) : 219-40

Taxonomie, écologie et distribution d'une Mélobésiée méditerranéenne: *Lithophyllum papillosum* (Zanardini) comb. nov., non *Lithophyllum* (*Dermatolithon*) *papillosum* (Zanard.) Foslie (Taxonomy, ecology and distribution of a Mediterranean Melobesiace: *Lithophyllum papillosum* (Zanardini) comb. nov., non *Lithophyllum* (*Dermatolithon*) *papillosum* (Zanard.) Foslie). De

M  
8-06206**Biebl, E.** (1962)*Bot. mar.*, 4 (3/4) : 241-60

Temperaturresistenz tropischer Meeresalgen (Verglichen mit jener von Algen in temperierten Meeresgebieten) Resistance to temperature of tropical marine algae—in comparison with the resistance of algae in temperate marine regions). Fr

Ci 1937 & 1938, Biebl, R. Examines marine algae for heat and cold resistance.

- Boaden, P. J. S.** (1962) M  
8-06207  
*Cah. Biol. mar.*, 3 : 245-8  
 Colonization of graded sand by an interstitial fauna

Results of an experiment on the colonization of sand samples graded according to particle size on the coast of North Wales.

- Gidholm, L.** (1962) M  
8-06208  
*Cah. Biol. mar.*, 3 : 249-60

Sur quelques polychètes syllidiens des sables de la région de Roscoff avec description de deux nouvelles espèces (Some syllid polychaetes of the sand of the Roscoff region. Description of two new species). En Ru

Describes two new spp. of syllids and comments upon two which are not previously recorded from the Channel area: *Eurysyllis brevipes* (Hartmann-Schröder), described from the Mediterranean under the new generic name of *Plakosyllis*, which is reported as a synonym; *Dioplosyllis cirrosa* n. gen., n. sp., *Brania swedmarki* n. sp., *Sphaerosyllis tetralix*. Follows a list of other syllids from a locality with Amphioxus-sand.

- Platel, R.** (1962) M  
8-06209  
*Cah. Biol. mar.*, 3 : 261-88

Histologie du tube digestif de *Myzostomum cirriferum* (Leuckart) (Myzostomides) (Histology of the alimentary canal of *Myzostomum cirriferum* (Leuckart), Myzostomides). En Ru

Histological, cytological and histochemical study of the alimentary canal and accurate description of this organ; defines the specific nature of the salivary glands and studies the real basic structure of the stomachal epithelium, defining its two most important flat and upper aspects, together with a mixed one, those three aspects reflecting the inward process of assimilation.

- Lévi, C. & A. Porte** (1962) M  
8-06210  
*Cah. Biol. mar.*, 3 : 307-15

Étude au microscope électronique de l'éponge *Oscarella lobularis* Schmidt et de sa larve amphiblastula (Study of the sponge *Oscarella lobularis* Schmidt and its larva amphiblastula with electronic microscope). Fr De

The two basic cell types of the sponge *Oscarella lobularis* are examined by electron microscope.

- Lindberg, G. U.** (1962) M  
8-06211  
*In* 8-06015 : 69-82

(О связи континентов Европы и Америки) (On the connection between the continents of Europe and North America). En

- Nesis, K. N.** (1962) M  
8-06212  
*In* 8-06015 : 83-98

Тихоокеанские элементы в бентосе северо-западной Атлантики (Pacific elements in northwestern Atlantic benthos). En

- M  
8-06213
- Nesis, K. N.** (1962)  
*In* 8-06015 : 219-25  
Sovetskie issledovaniia bentosa N'iufaundlendsko-Labradorskogo promyslovogo raiona (Soviet investigations of benthos in Newfoundland-Labrador fishing area). En
- M  
8-06214
- Cherbonnier, G.** (1962)  
*Résult. sci. Expéd. océanogr. belge Atlant. Sud*, 3 (8) : 24 p.  
Ophiurides (Ophiurids)  
Catalogue of 21 spp. collected in the South Atlantic African waters by Belgian Oceanographic Expedition during 1948-1949 and 1955.
- M  
8-06215
- Pasteur-Humbert, C.** (1962)  
*Nature, Lond.*, 196 (4856) : 790  
Chromatophoric responses of eyestalk-less shrimps  
Reports that the chromatophoric behaviour of eyestalkless *Palaemon serratus* did not settle completely after bilateral ablation.
- M  
8-06216
- Castagné, M.** (1962)  
*Sci. et Pêche*, (103) : 3-7  
Observations sur la salubrité ostréicole dans le bassin d'Arcachon (Observations on the salubrity of the basin of Arcachon for oyster culture)
- M  
8-06217
- Medcof, J. C.** (1962)  
*Gen. Ser. Circ. biol. Sta., St. Andrews, N.B.*, (36) : 3 p.  
Collecting spat and producing bedding oysters on shell strings
- M  
8-06218
- Booolootian, R. A., A. Farmanfarmaian & A. C. Giese** (1962)  
*Biol. Bull., Woods Hole*, 122 (2) : 183-93  
On the reproductive cycle and breeding habits of two western species of *Haliotis*  
Changes in the size of *Haliotis cracherodii* and *H. rufescens* gonads relative to body size throughout the year, are studied.
- M  
8-06219
- Branham, J. & C. B. Metz** (1962)  
*Biol. Bull., Woods Hole*, 122 (2) : 194-207  
Inhibition of fertilizing agglutination and fertilization in *Arbacia* by *Fucus* extracts
- M  
8-06220
- Dehnel, P. A.** (1962)  
*Biol. Bull., Woods Hole*, 122 (2) : 208-51  
Aspects of osmoregulation in two species of intertidal crabs  
Determines the osmotic behaviour of the two spp. of *Hemigrapsus* when exposed to a series of salinities, as well as to changing seasonal field salinities and studies the effect of temperature on osmotic regulation.



- M  
8-06221
- Bauchau, A. G.** (1962)  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Endocrine control of growth in brachyuran Crustacea

Do 61-295me.

- M  
8-06222
- Van Damme, N.** (1962)  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Neurosecretion in *Nereis diversicolor*

Do 61-295me. Studies histology of the nervous system, with the help of the recent techniques that stain the neurosecretory material.

- M  
8-06223
- Howie, D. I. D.** (1962)  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Neurosecretion in relation to spawning and maturation of the gametes in *Arenicola marina* L.

Do 61-295me.

- M  
8-06224
- Durchon, M.** (1962)  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Induction et inhibition expérimentales de l'épitoquie par homogreffes chez les Nereidiens (Annélides Polychètes) (Experimental induction and inhibition of epitoky by means of homografting in nereids)

Do 61-295me.

- M  
8-06225
- Van Someren, V. D. & P. J. Whitehead** (1961)  
*Fish. Publ., Lond.*, (14) : 36 p.

An investigation of the biology and culture of an East African oyster *Crassostrea cucullata*

Data on ecology, including physicochemical data, spawning, biology, growth and culture methods.

- M  
8-06226
- Tardy, J.** (1962)  
*C.R. Acad. Sci., Paris*, 255 (23) : 3250-2

Cycle biologique et métamorphose d'*Eolidina alderi* (gastéropode, nudibranche) (Biological cycle and metamorphosis of *Eolidina alderi*, Gasteropoda, Nudibranchia)

Preliminary note describing embryonic development, metamorphosis and growth based on observations of various generations of animals.

- Kuneva-Abadzhieva, V.** (1960) M  
8-06227  
*Trud. nauch.-izsled. Inst. Rib. Prom. Varna*, 2 : 149-72  
 Prinos kum izuchavaneto na mekotelnata fauna na Chernomore pred bulgarskiiia briag (Materials to the study of the mollusc fauna in the Black Sea at the Bulgarian shores). *Bu En*
- Kuneva-Abadzhieva, V.** (1960) M  
8-06228  
*Trud. nauch.-izsled. Inst. Rib. Prom. Varna*, 2 : 173-93  
 Izsledvane na zoobentosa na Varnenskiia zaliv s ogled na mekotelite i malakostrakite (Researches of zoobenthos of the Bay of Varna in respect of Mollusca and Malacostraca). *Bu En*
- Saidova, Kh. M.** (1961) M  
8-06229  
*Dokl. Akad. Nauk SSSR*, 139 (4) : 967-9  
 Kolichestvennoe raspredelenie donnykh foraminifer v Antarktike (The quantitative distribution of bottom Foraminifera in Antarctica)
- Kriss, A. E.** (1962) M  
8-06230  
*Dokl. Akad. Nauk SSSR*, 146 (6) : 1422-5  
 Raspredelenie geterotrofnnykh bakterii v vodnoi tolshe Tikhogo okeana (Distribution of heterotrophic bacteria in the waters of the Pacific)
- Koval'skii, V. V., L. T. Rezaeva & G. V. Kol'tsov** (1962) M  
8-06231  
*Dokl. Akad. Nauk SSSR*, 147 (5) : 1215-52  
 Soderzhanie mikroelementov v organizme i kletkakh krovi astsidi (The content of trace elements in the organism and blood cells of Ascidiaceae)
- Jurko, O.** (1960)\* M  
8-06232  
*Nova proizvod.*, (11) : 322  
 Adriatische Algen als Beifutter (Adriatic algae mixed with fodder)
- Humm, H. J.** (1962) M  
8-06233  
*Spec. sci. Rep. Va Inst. Mar. Sci.*, (37) : 13 p.  
 Marine algae of Virginia as a source of agar and agaroids  
 Gives vegetative characteristics, methods of extracting and dehydrating the polysaccharides, and the principal physical properties of extractives from *Gelidium crinale*, *Agardhiella tenera*, *Hypnea musciformis*, *Gracilaria verrucosa*, and *G. foliifera*. Indicates their potential economic value as well as for basic research work.
- Seemann, W.** (1960) MF  
8-06234  
*Z. Fisch.*, 9 (5/6) : 353-64  
 Der Sehlendorfer Binnensee (1-6). Limnologische und fischereibiologische Untersuchung eines Strandgewässers an der deutschen Ostseeküste. 2. Die Wasser-, Gelege- und Uferpflanzen des Sehlendorfer Binnensees (The Sehlendorfer inland lake. 1-6. Limnological and biological investigations of a brackish water lake on the Baltic coast. 2. Hydrophytes and shore vegetation of the Sehlendorfer inland lake). *En Ru*  
 Ci 8-06249.

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- Schmidt, G. A.** (1962)  
*Dokl. Akad. Nauk SSSR*, 147 (6) : 1512-5  
Korrelatsii mezhdu zakladkami khobota i glotki u nemertin *Lineus desori* (mihi, species nova) i *Lineus ruber* (O. F. Mülleri, 1774, G. A. Schmidt, 1945) (Correlation between the rudiments of proboscis and fore-gut (pharynx) in Nemertini *Lineus desori* (mihi, sp. nov.) and *Lineus ruber* (O. F. Müller, 1774, G. A. Schmidt, 1945))
- M  
8-06236
- Lewis, E. J. & E. A. Gonzalves** (1962)  
*Ann. Bot., Lond.*, 26 (103) : 301-16  
The protein, peptide and free amino-acid contents of some species of marine algae from Bombay
- The technique of circular paper chromatography was utilized for the isolation, confirmation and estimation of amino acids in the proteins, peptides, and free state, in 12 spp. of marine algae collected from Bombay.
- M  
8-06237
- Lewis, E. J. & E. A. Gonzalves** (1962)  
*Ann. Bot., Lond.*, 26 (103) : 317-27  
Periodic studies of the proteins, peptides, and free amino-acids in *Enteromorpha prolifera* f. *capillaris* and *Ulva lactuca* var. *rigida*
- A study undertaken to ascertain whether any change occurs in the amino-acid constituents of the proteins, peptides, and in the free state in the 2 spp.
- M  
8-06238
- Evans, L. V.** (1962)  
*Ann. Bot., Lond.*, 26 (103) : 345-60  
Cystological studies in the genus *Fucus*
- An investigation of the chromosome number of the four commoner spp. of *Fucus* using a modified acetocarmine squash technique has revealed a likely diploid complement of 64 and a haploid complement of 32. The uniformity in chromosome number, size, and appearance in the various spp. helps to explain the ease with which hybrids are formed.
- M  
8-06239
- Stewart, W. D. P.** (1962)  
*Ann. Bot., Lond.*, 26 (103) : 439-45  
Fixation of elemental nitrogen by marine blue-green algae
- Calothrix scopulorum*, *Nostoc entophyllum*, and *Oscillatoria brevis*, isolated from the upper littoral and supralittoral fringe of the sea-shore were obtained in pure culture and tested for fixation of elemental nitrogen.
- M  
8-06240
- Ryland, J. S.** (1960)  
*Proc. zool. Soc. Lond.*, 134 (1) : 65-105  
The British species of *Bugula* (Polyzoa)
- General account of genus; Key to British species; Systematic account of species; Discussion: confusion between some similar species. Issued also as: *Contr. Mar. Biol. Univ. Wales*.

**Berlitz, J. (1959)\***MF  
8-06241*C.R. Soc. Biogéogr.*, (308) : 89-91Introduction à l'étude du peuplement biologique de la région antillaise  
(Introduction to the study of biological settlements in the West Indian region)**Delaware University. Department of Biological Sciences (1960)**  
*Estuar. Bull.*, 5 (3) : 15 p.MF  
8-06242

Contains notes dealing with studies of oysters in vicinity of Delaware Marine Laboratory.

**Delaware University. Department of Biological Sciences (1961)**  
*Estuar. Bull.*, 6 (3/4) : 14 p.MF  
8-06243Contains notes and short popular articles dealing with studies on *Callinectes sapidus* and *Crangon septemspinosa* in vicinity of Delaware Marine Laboratory; incl. also a general article on sharks.**Crichton, O. W. (1960)**  
*Estuar. Bull.*, 5 (4) : 3-10MF  
8-06244

Marsh crab intertidal tunnel-maker and grass-eater

Reports some observations on the life history, burrowing behaviour, feeding and role in estuarine productivity of *Sesarma reticulatum*.**Salvat, B. (1962)**  
*Cah. Biol. mar.*, 3 : 219-44MF  
8-06245

Faune des sédiments meubles intertidaux du bassin d'Arcachon (Fauna of the soft intertidal sediments of the basin of Arcachon). En De

An account is given of the crustaceans, mollusks and echinoderms. A few zostera-area dwelling spp. and some brackish forms are also listed. Ecotope, occurrence and geographical distributions are given for each intertidal sp. Place of capture is described with data on intertidal zonation and type of deposit. Special reference is made on *Branchiostoma lanceolatum*.**Redmond, J. R. (1962)**  
*Biol. Bull., Woods Hole*, 122 (2) : 252-97MF  
8-06246Oxygen-hemocyanin relationships in the land crab, *Cardisoma guanhumi***Ruffo, S. (1960)**  
*Mém. Inst. sci. Madagascar (A)*, 14 : 63-9MF  
8-06247Studi sui crostacei anfipodi 56. Anfipodi raccolti dalla spedizione austriaca 1958 nel Madagascar con descrizione di una nuova specie di *Austroniphargus* Monod (Study of crustacean amphipods 56. Amphipods collected by the Austrian expedition of 1958 in Madagascar with description of a new species of *Austroniphargus* Monod). It



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*J. Wat. Poll. Contr. Fed.*, 34 : 279-90  
 Causes, effects, and control of aquatic growths  
 WPA 35 (9) 1864.
- Seemann, W.** (1960) MF  
*Z. Fisch.*, 9 (5/6) : 407-16  
 Der Sehlendorfer Binnensee (1-6). Limnologische und fischereibiologische Untersuchung eines Strandgewässers an der deutschen Ostseeküste. 4. Die Bodenverhältnisse und Bodenbesiedlung des Sehlendorfer Binnensees unter besonderer Berücksichtigung der Fischnährtiere) (The Sehlendorfer inland lake. 1-6. Limnological and biological investigations of a brackish water lake on the Baltic coast. 4. Soil conditions and bottom population of the Sehlendorfer inland lake with special regard to the animals serving as food of edible fish). En Ru  
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- Barnabash-Nikiforov, I. I.** (1959)\* F  
*Zool. Zh.*, 38 : 767-71  
 Symbiotic relations of the inhabitants of a beaver burrow  
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- Pankratova, V. Y.** (1959)\* F  
*Trud. zool. Inst. Akad. Nauk SSSR*, 26 : 296-346  
 (Benthos of the ponds for rearing *Vimba vimba*, *Chalcalburnus chalcoides* and its changes caused by improved conditions). Ru  
 8-06251
- Grigialis, A. T.** (1959)\* F  
*Trud. Akad. Nauk litovsk. SSR*, (B), 4 (20) : 231-7  
 (Zoobenthos of the lake Shvogin and its dynamics). Li Ru  
 8-06252
- Vilisova, I. K.** (1959)\* F  
*Trav. Sta. limnol. Lac Bajkal*, 17 : 305-12  
 (Contribution to the knowledge of microbenthos of Baikal Sea). Ru  
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- Lazaroff, N. & J. Schiff** (1962) F  
*Science*, 137 (3530) : 603-4  
 Action spectrum for developmental photo-induction of the blue-green alga *Nostoc muscorum*  
 Experiments show that dark-grown cyanophyte requires a brief exposure to light before it can complete its developmental cycle. Induction is reversed by exposure to green light.  
 8-06254
- Bishop, N. I.** (1962) F  
*Nature, Lond.*, 195 (4836) : 55-7  
 Separation of the oxygen evolving system of photosynthesis from the photochemistry in a mutant of *Scenedesmus*  
 8-06255

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**Nichiporovich, A. A., V. E. Semenenko & M. G. Vladimirova** 8-06256  
(1962)

*Izv. Akad. Nauk SSSR (biol.)*, (2) : 163-72

Intensifikatsiia fotosinteticheskoi produktivnosti kultury odnokletochnykh vodoroslei (Some principles of intensification of photosynthetic productivity of unicellular algae). En

Use of unicellular algae for ensuring human life in cosmic flights. Comparison of productivity of an algal suspension with that of higher plants. Laboratory cultivation and study of photosynthetic productivity.

F

**Steinbach, H. B.** (1962) 8-06257

*Biol. Bull., Woods Hole*, 122 (2) : 310-9

Ionic and water balance of planarians

Experiments on *Dugesia tigrinum* and the ectoparasite of *Limulus*, *Bdelloura* (species not determined).

F

**Brehm, V.** (1960) 8-06258

*Mém. Inst. sci. Madagascar (A)*, 14 : 39-58

Ergebnisse der Österreichischen Madagaskar Expedition 1958. 1. Beitrag zur Kenntnis des Planktons madagassischer Stillgewässer (Mitteilung aus der Biologischen Station Lunz) (Results of the Austrian Madagascar Expedition 1958. 1. Contribution to the knowledge of Crustacea in Madagascar stagnant waters. Information from the Biological Station Lunz)

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**Hagadorn, I. E.** (1962) 8-06259

*Gen. comp. Endocr.*, 2 (6) : 516-40

Functional correlates of neurosecretion in the rhynchobdellid Leech, *Theromyzon rude*

Studies the neurosecretory system of the brain with the light microscope and its possible relationship to reproduction by standard endocrinological techniques.

F

**Herlant-Meewis, H.** (1962) 8-06260

Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Endocrine relationship between nutrition and reproduction in the oligochaete, *Eisenia foetida*

Do 61-295me.

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**Makhlin, E. E.** (1961) 8-06261

*Dokl. Akad. Nauk SSSR*, 139 (4) : 980-3

Teploustoichivost' grudnykh nozhek baikal'skikh gammarid (Heat resistance of thoracic pereopods in Baikalian Gammaridae)

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- Wulfiert, K.** (1960)  
*Arch. Hydrobiol.*, 56 (3) : 261-98

Die Rädertiere saurer Gewässer der Dübener Heide. 1. Die Rotatorien des Zadlitzmoors und des Wildenhainer Bruchs (The rotifers of acid waters in the Dübener Heide. 1. The Rotatoria of the moors of Zadlitz and Wildenhain). En

Investigations carried out during the summer 1958 in Eastern Germany.

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8-06263
- Gusev, M. V.** (1962)  
*Dokl. Akad. Nauk SSSR*, 147 (4) : 947-50

Vliianie rastvorennogo kisloroda na razvitie sinezelenykh vodoroslei (The effect of dilute oxygen on the development of blue-green algae)

Experiments carried out with *Anabaema variabilis* and *Amorphonostoc punctiforme*.

- F  
8-06264
- Spektorov, K. S. & E. A. Lin'kova** (1962)  
*Dokl. Akad. Nauk SSSR*, 147 (4) : 967-9

O novom uprosheennom metode sinkhronizatsii kul'tur khlorelli (A new simplified method of synchronized chlorella culture)

Experiments carried out with *Chlorella pyrenoidosa* and *Chlorella ellipsoidae*.

- F  
8-06265
- Keiz, G. & H.-H. Reichenbach-Klinke** (1961)  
*Allg. FischZtg.*, 86 (20) : 626-30

Über Bühnenteichuntersuchungen am mittleren Main (Investigations into spur dike ponds of the middle Main river)

Report on plankton and bottom fauna composition. Results of stocking measurements.

- F  
8-06266
- Reid, G. W. & J. R. Assenzie** (1961)  
*Wat. & Sewage Wks*, 108 : 264-9

Culture and harvesting of attached algae grown on domestic sewage. 2.

Laboratory and pilot plant studies on municipal sewage in batch and continuous operation made. Predominant algae were *Microspora* and *Chlorella*.

Co 8-08226.

- F  
8-06267
- Barthelmes, D.** (1961)  
*Z. Fisch.*, 10 (4/5) : 309-28

*Chironomus forma larvalis plumosus* in grossen, ablassbaren Karpfenteichen (*Chironomus forma larvalis plumosus* in big drained carp ponds). En Ru

- F  
8-06268
- Schlüter, M.** (1961)  
*Z. Fisch.*, 10 (4/5) : 351-9  
 Zur Bedeutung der litoralen Diatomeen in unseren Gewässern (On the importance of littoral diatoms in our waters). En Ru

The importance of diatoms for the production of food animals is emphasized.

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8-06269
- Albrecht, M. L.** (1959)  
*Z. Fisch.*, 8 (7/8) : 481-550  
 Die quantitative Untersuchung der Bodenfauna fliessender Gewässer (Untersuchungsmethoden und Arbeitsergebnisse) (Quantitative investigations of the bottom fauna of running waters. Methods and results of investigations). En Ru

Attempt to compile all the known literature of the present subject as well as to summarize research methods and working results.

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8-06270
- Bick, H.** (1959)  
*Z. Fisch.*, 8 (7/8) : 635-8  
*Gammarus pulex fossarum* KOCH 1835 als Fallaubzersetzer (The role of *Gammarus pulex fossarum* KOCH 1835 in the decomposition of deciduous foliage in waters). En Ru

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8-06271
- Surber, E. W.** (1961)  
*Circ. U.S. Fish Wildl. Serv.*, (128) : 37 p.  
 Improving sport fishing by control of aquatic weeds

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8-06272
- Maurin, Cl.** (1962)  
*Rev. Trav. Inst. Pêches marit.*, 26 (2) : 163-218  
 Étude des fonds chalutables de la Méditerranée occidentale (Écologie et pêche). Résultats des campagnes des navires océanographiques 'Président-Théodore-Tissier' 1957 à 1960 et 'Thalassa' 1960 et 1961 (Studies of the trawling grounds of the western Mediterranean (ecology and fisheries). Results of the cruises of the oceanographic vessels 'Président-Théodore-Tissier' 1957 to 1960 and 'Thalassa' 1960 and 1961)

Characteristics of the grounds at different depths and fishing yields of various regions of the area studied. Index of species caught.

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8-06273
- Boury, M.** (1962)  
*Sci. et Pêche*, (103) : 1-3  
 Appréciation de la qualité bactériologique des coquillages (Bacteriological quality of mollusks)



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- Bérubé, Z.** (1961) M  
8-06274  
*Actualités mar.*, 5 (3) : 24-32  
 Les pêcheries maritimes 1960 (The marine fisheries 1960)

Statistical tables and remarks on the catch, values and fish products in the years 1957-1960 in the Quebec district (part of gulf of Saint Laurent, and bay of Chaleurs).

- Film** (1962) M  
8-06275  
 Vickers Ltd., Vickers House, Broadway, London  
 Trawling

- Anon.** (1962) M  
8-06276  
*Bol. Comp. adm. Guano*, 38 (1/2) : 12-22  
 La explotación del guano de islas en el Perú (The exploitation of guano in the islands in Peru)

Describes geographic situation and characteristics of the coast and the sea of Peru, the food of the guano birds, and the company exploiting the guano.

- Anon.** (1962) M  
8-06277  
*Bol. Comp. adm. Guano*, 38 (3) : 15-23  
 La explotación del guano de islas en el Perú (The exploitation of guano in the islands in Peru)  
 Co 8-06276.

- Anon.** (1962) M  
8-06278  
*Bol. Comp. adm. Guano*, 38 (4) : 19-28  
 La explotación del guano de islas en el Perú (The exploitation of guano in the islands in Peru)  
 Co 8-06277.

- Anon.** (1962) M  
8-06279  
*Bol. Comp. adm. Guano*, 38 (4) : 13-26  
 La explotación del guano de islas en el Perú (The exploitation of guano in the islands in Peru)  
 Co 8-06278. Notes on the guano birds *Sula variegata* and *Pelecanus occidentalis thagus*, brief history and value of the guano as fertilizer.

- Crisp, D. T.** (1962) M  
8-06280  
*Norsk Hvalfangst-tid.*, 51 (10) : 389-93  
 The tonnages of whales taken by Antarctic pelagic operations during twenty seasons and an examination of the Blue Whale Unit

An account of a simple analysis of the catches in relation to tonnage, species composition, production and the Blue Whale Unit (B.W.U.) in the years 1932-1933 to 1938-1939 and 1946-1947 to 1958-1959.

- Anon. (1962)** M  
8-06281  
*Norsk Hvalfangst-tid.*, 51 (10) : 400-10  
 Catch statistics. The summer season 1961

Statistics of catches in Natal, Cape Province, Brazil, Azores, Madeira, Spain, Norway, Iceland, California, Oregon, Japan, North Pacific Ocean and Bering Sea.

- Anon. (1962)** M  
8-06282  
*Norsk Hvalfangst-tid.*, 51 (10) : 414-5  
 Tabulated information respecting Norwegian whaling companies

Information on number of catchers, whaling grounds, total number of crew, catch results in barrels.

- Anon. (1962)** M  
8-06283  
*Norsk Hvalfangst-tid.*, 51 (10) : 416-7  
 Tabulated information respecting foreign whaling companies

Information on number of catchers, whaling grounds, total number of crew, catch results in barrels.

- Rossignol, M., J. Blache & R. Repelin (1962)** M  
8-06284  
 Pointe Noire, Centre Océanographique, 13 p.  
 Fonds de pêche le long des côtes de la république du Gabon (Fishing grounds along the coasts of the Gabonese Republic)

- Cole, R. C. & L. H. Greenwood-Barton (1962)** M  
8-06285  
*Trop. Sci.*, 4 (3) : 127-46  
 Problem associated with the development of fisheries in tropical countries:  
 1. The mechanization of fishing boats

First of series of papers dealing with all aspects of tropical fisheries. Advantages—and possible disadvantages—of mechanization are described. Follows a discussion of best methods of providing fishermen with power, whether by towing their boats to the fishing grounds or by fitting their craft with outboard or inboard diesel engines. Question of how to finance mechanization is examined.

- Anon. (1962)** M  
8-06286  
*Norsk. Hvalfangst-tid.*, 51 (12) : 485-94  
 Catch statistics. Antarctic season 1961/62

Catches by Norwegian, British, Japanese, Dutch, USSR and South Georgia companies.

- M  
8-06287
- Gordini, J. M.** (1962)  
*Pesca y Marina*, 14 (4) : 4-9, 20  
 La pesca en el mar argentino (Fisheries in the Argentinian Sea)  
 Review of Argentine fisheries.

- M  
8-06288
- Holt, S. J.** (1962)  
*Industr. pesq., Vigo*, 36 (848) : 294-5  
 La exploración y la pesca experimental (Exploratory and experimental fishing)  
 Gear in action, units of research, collaboration of fishermen.

- M  
8-06289
- Gdynia. Polish Chamber of Foreign Trade** (1962)  
*Pol. marit. News*, 5 (49) : 20 p.

Section on fishing gives information about the fishing port of Gdynia; Fishing news bulletin gives notes on catches, govt. and industrial activities.

- M  
8-06290
- Tunstall, J.** (1962)  
 London, Macgibbon & Kee, 294 p.  
 The fishermen

Sociological account of fishermen engaged in trawler fishing in Hull, England. Describes in detail the present fishing, recruitment, crew at sea and ashore, fishermen's domestic life, trawler ownership, trade unions.

- M  
8-06291
- Toyama, Y. & T. Kaneda** (1962)  
*In* 8-06045 : 149-73  
 Nutritive aspects of fish oils

Discusses the topic under chapters: Nutritive value of fish oil components; Edible oils from fish sources. Incl. bibliographic list.

- MF  
8-06292
- Lassarat, J.** (1962)\*  
*Rev. encycl. Afr.* : 14-6  
 Les pêches en côte d'Ivoire (Fisheries on the Ivory Coast)

- MF  
8-06293
- Geiger, E. & G. Borgstrom** (1962)  
*In* 8-06045 : 29-114  
 Fish protein—nutritive aspects

Discusses the topic under chapters: Protein content; Methods of appraisal; Biological value; Amino acid composition; Dark meat (cat food); Role of minerals; Digestibility; Changes in storage and processing; The supplementary value of fish protein; Fish flour; Fish meal; Fish solubles; Whale protein. Incl. bibliographic list.

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**Borgstrom, G.** (1962)

*In* 8-06045 : 115-47

Shellfish protein—nutritive aspects

MF  
8-06294

Discusses the topic under chapters: Protein content; Biological value; Amino acid composition; Other nutrients; Digestibility; Changes in storage and processing; Shellfish meals. Incl. bibliographic list.

**Cruikshank, E.** (1962)

*In* 8-06045 : 175-203

Fat soluble vitamins

MF  
8-06295

Discusses the topic under chapters: Factors affecting vitamin content; Vitamin A; Vitamin D; Vitamin E. Incl. bibliographic list.

**Causeret, J.** (1962)

*In* 8-06045 : 205-34

Fish as a source of mineral nutrition

MF  
8-06296

Discusses the topic under chapters: Brief review of mineral composition; Influence of cooking on mineral composition; Physiological utilization of the mineral constituents; The importance of fish as a source of minerals. Incl. bibliographic list.

**Tarr, H. L. A.** (1962)

*In* 8-06045 : 235-66

Changes in nutritive value through handling and processing procedures

MF  
8-06297

Discusses the topic under chapters: Physical losses in round and dressed fish; Physical losses during processing; Chemical losses due to destruction or removal of nutrients. Incl. bibliographic list.

**Borgstrom, G.** (1962)

*In* 8-06045 : 267-360

Fish in world nutrition

MF  
8-06298

Discusses the topic under chapters: Background information; Aquatic production and world feeding; Appraisal methods; Fish in improved nutrition; Potentialities. Incl. bibliographic list.

**Arimoto, K.** (1962)

*In* 8-06045 : 361-75

The role of marine and fresh-water foods in the Japanese diet

MF  
8-06299

Discusses the topic under chapters: Diet; Catch and consumption; Nutritive value of Japanese seafood; Seafood in the diet. Incl. bibliographic list.



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**March, B. E. (1962)** MF  
*In* 8-06045 : 377-434 8-06300  
 Fish meal and condensed fish solubles in poultry and livestock feeding

Discusses the topic under chapters: Fish meal—general considerations; Factors affecting the nutritive value of fish meal; condensed fish solubles; Other products. Incl bibliographic list.

**Borgstrom, G. (1962)** MF  
*In* 8-06045 : 637-725 8-06301  
 Trends in utilization of fish and shellfish

Discusses the topic under chapters: Fish catch per capita; Marine and fresh-water characteristics; General survey of disposal channels; Remote fishing; Floating factories; Fresh market fish; Curing, smoking and drying; Canning; Freezing; Industrial fish utilization; Herring, sardine and pilchard; Redfish; Sand eels; Tuna; Shark; Crustaceans; Cephalopods; Whale utilization; Special fish products; Fish oils; Factors in utilization; Utilization patterns in selected countries; Waste utilization, Trade patterns. Incl. bibliographic list.

**Saburenkov, N. M. (1961)\*** MF  
 Washington, U.S. Govt. Print. Off., JPRS: 11745, 10 p. 8-06302  
 Fishing industry in People's Republic of China

**Mikhailov, S. V. (1962)\*** MF  
*Okeanologia*, 2 (3) : 385-92 8-06303  
 (On the comparative efficiency of production of some products of the land and sea). *Ru*

An attempt to compare the productivity (by weight, value and types of products) of inland and marine fisheries, incl. whaling, with livestock raising and vegetable oil production in USSR, per unit import of labor time and capital.

**Mikhailov, S. V. (W. G. Van Campen, Transl.) (1962)** MF  
 USFWS, Bureau of Commercial Fisheries, Honolulu, 11 p. 8-06304  
 On the comparative efficiency of production of some products of the land and sea

*En* 8-06303.

**Anon. (1962)** F  
*Ber. Dienst Econ. Zaken Ned. Nw Guinea*, 2, 36A : 1-2 8-06305  
 The inland fisheries. A summary

TA (6) j3153. Summarizes work carried out in the former Netherlands New Guinea in the field of inland fisheries.

- Ohio River Valley Water Sanitation Commission** (1962) F  
8-06306  
Cincinnati, 226 p.  
Aquatic-life resources of the Ohio River  
WPA 35 (9) 1733.
- Northrop, R. B.** (1962) F  
8-06307  
Mimeo, unpag., 7 p.  
Variable pulse parameter DC shocker control. Operation manual. Designed for Connecticut State Board of Fisheries and Game.
- Menzel, H. U. & J. Rahn** (1961) F  
8-06308  
*Dtsch. Fisch.-Ztg.*, 8 (4) : 97-101  
Jahresbericht 1960 über die Produktion der Binnenfischerei der Deutschen Demokratischen Republik (1960 annual report of the inland fisheries production in Eastern Germany)
- Jackson, C. F.** (1962) F  
8-06309  
*Tech. Cir. N.H. Fish. Dep.*, (19) : 15 p.  
Use of paper chromatography in identifying meat of game animals  
SFA 7 (3) 5061. Method may be used to identify meat of any animal including fish and birds provided known samples are available for comparison.
- Kilariski, W.** (1960) F  
8-06310  
*Acta biol. cracov. Zool.*, 3 (1) : 23-57  
(*Thuszcz niektórych ryb kostnoszkieletowych* (Fat in some teleost fish). *Pl*  
SFA 7 (3) 5188. Grayling, stickleback, vimba and minnow, stained in histological sections with Sudan 3 and 4. For quantitative determination of fat, glycerides and phospholipids together, gravimetric method, described by W. M. Sperry, was used.
- Leoschke, W. L.** (1962) F  
8-06311  
*In* 8-06045 : 435-41  
Fish in the raising of mink  
Discusses the topic under chapters: In the ranch diet; Nutritional problems in feeding fish; Handling fish. Incl. bibliographic list.
- U.S. Joint Publications Research Service** (1961)\* F  
8-06312  
Washington, U.S. Govt. Print. Office, JPRS, 70 p.  
Agriculture, forestry, and fishing in Hungary
- FAO** (1961) G  
8-06313  
*Rep. FAO/ETAP*, (1449)  
Report to the government of Ghana on foods and nutrition. Based on the work of F. Aylward, FAO/TA expert

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*Nature, Lond.*, 195 (4836) : 27  
 Food technology in Ghana  
 Re 8-06313.

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- Landois, R.** (1959)\*  
*Zoo, Antwerp*, 25 : 15-25

Présentation artistique et aménagement technique de notre aquarium  
 (Artistical presentation and technical management of our aquarium)

M  
8-06315

- Lindberg et al.** (1959)\*  
*Issled. dal'nevost. Mor. SSSR*, 6 (2) : 173-253

A list of fauna of the sea waters of the south Sakhalin and south Kuril Islands

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8-06316

- Gaillard, J. M.** (1959)\*  
*Penn ar Bed*, (16) : 6-9

Quelques animaux marins ayant récemment atteint les côtes de Bretagne  
 (Some marine animals which have reached recently the coasts of Brittany)

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8-06317

- Verwey, J.** (1959)\*  
*Arch. néer. Zool.*, 13 (1) : 418-45

Orientation in migrating marine animals and a comparison with that of other migrants

M  
8-06318

- Dahl, E.** (1959)  
*Nature, Lond.*, 183 : 1749

The amphipod, *Hyperia galba*, an ectoparasite of the jellyfish, *Cyanea capillata*

Preliminary note.

M  
8-06319

- Adam, H.** (1960)\*  
*Naturwissenschaften*, (14) : 333-4

Über das Vorkommen einer peritrophischen Membran im Darm von *Myxine glutinosa* L. (Cyclostomata) (On the existence of a peritrophic membrane in the intestine of *Myxine glutinosa* L., Cyclostomata)

M  
8-06320

- Eliassen, E., H. Leivestad & D. Möller** (1960)\*  
*Arb. Univ. Bergen. Mat. naturv. Ser.*, (14) : 1-24

The effect of low temperatures on the freezing point of plasma and on the potassium/sodium ratio in the muscles of some boreal and subarctic fishes

M  
8-06321

**Wegner, R. N. (1959)\***M  
8-06322*Abh. dtsh. Akad. Wiss. Berl.*, (4) : 1-80Der Schädelbau der Lederschildkröte *Dermochelys coriacea* Linné (The skull structure in the leather turtle *Dermochelys coriacea* Linné)**Matthews, L. H. (1962)**M  
8-06323*Nature, Lond.*, 196 (4853) : 404

Whales

Re 8-12002.

**Rodriguez-Roda, J. & J. K. Howard (1962)**M  
8-06324*Nature, Lond.*, 196 (4853) : 495-6

Presence of Istiophoridae along the South Atlantic and Mediterranean coasts of Spain

As result of co-operative undertaking of Laboratorio del Instituto de Investigaciones Pesqueras de Cadiz with Marine Laboratory of the University of Miami during years 1960 and 1961, twenty-one specimens obtained, of which nineteen were *Tetrapturus albidus*.

**Chávez, H. (1961)\***M  
8-06325*Ciencia, Mex.*, 21 (2) : 75-83

Estudio de una nueva especie de robalo del Golfo de México y redescription de *Centropomus undecimalis* (Bloch) Pisc., Centropom. (Study of a new species of haddock from the gulf of Mexico and redescription of *Centropomus undecimalis* (Bloch) Pisc., Centropom.)

**Davies, D. H. (1961)**M  
8-06326*Field & Tide*, 2 p.

Bubble barrier for sharks

Short account of the shark research program of the Oceanographic Research Institute in Durban, with particular reference to the experiments carried out in view of protecting swimmers.

**Mitani, F. (1960)\***M  
8-06327*Mem. Fac. Agric. Kinki Univ.*, (1) : 81-300

(Fishery biology of the yellow-tailed, *Seriola quinqueradiata* T. & S., inhabiting the waters around Japan). *Ni*

Carangidae.

**Chalazonitis, N. & R. Chagneux (1961)**M  
8-06328*Bull. Inst. océanogr. Monaco*, (1223) : 20 p.Photopotentials of the *Sepia* giant axons sensitized to light

States that the imitation of a generator potential (slow wave with firing of spikes) is the main response induced by light activation of the stained axons. It is due to a further development of inductive properties into the axon membrane. Discusses the possible decrease of the membrane resistance by light activation.



- M  
8-06329
- De Ramirez, O. P.** (1962)  
Thesis, Universidad Nacional Mayor de San Marcos, Facultad de Ciencias, Escuela Instituto de Ciencias Biologicas, 100 p.

Contribución al estudio de la biología del cachalote (*Physeter catodon* L.) en el Perú, con especial referencia a su desarrollo morfológico (Contribution to the study of the biology of the sperm whale (*Physeter catodon* L.) in Peru, with special reference to its morphological development). *Pr*

Monograph with chapters on taxonomy, biology (feeding, parasites, diseases, behaviour, sexuality and breeding), morphology of the foetus, development and anomalies, whaling; bibliography.

- M  
8-06330
- Heggem, C. J.** (1962)  
Mimeo, 23 p.

Notes regarding centolla (king crab) industry (*Lithodes antarcticus*), Punta Arenas—Porvenir, November 1961–January 1962

Preliminary information on centolla (*Lithodes antarcticus*). A brief description is given of the fishing methods, processing methods and fishing gear used. Tables give some biometric data and relevant statistics regarding the industry.

- M  
8-06331
- Burdon-Jones, C.** (1961)  
*Nat. in Wales*, 7 : 39–42

Atlantic leatherback turtles in Wales

Brief account of turtles or luth with notes of records round the Welsh coast and a map for the British Isles.

- M  
8-06332
- Monteiro, R.** (1962)  
*Notas Cent. Biol. pisc., Lisboa*, (25) : 12 p.

Sobre a ocorrência de *Sardinops ocellata* (Pappé) em águas centro-Angolanas (On the occurrence of *Sardinops ocellata* (Pappé) in the waters of central Angola). *Pr*

*Pr* 62-04923.

- M  
8-06333
- Smirnov, A. I.** (1962)  
*Dokl. Akad. Nauk SSSR*, 143 (6) : 1449–52

Ekologiia razmnozheniia simy *Oncorhynchus masu* (Brevoort) (Reproduction ecology of *Oncorhynchus masu* (Brevoort) )

- M  
8-06334
- Pinto, J. S., I. F. Barraca & M. E. Assis** (1961)  
*Notas Estud. Inst. Biol. marít.*, (23) : 13 p.

Nouvelles observations sur la coccidiose par *Eimeria sardinae* (Thélohan), chez les sardines des environs de Lisbonne, en 1961 (New observations on coccidiosis by *Eimeria sardinae* (Thélohan), in the sardines of the surrounding of Lisbon in 1961)

- M  
8-06335
- Tuzet, O. & R. Ormières** (1962)  
*Cah. Biol. mar.*, 3 : 289-306  
 Grégarines de Roscoff (Gregarinas of Roscoff)

Lists by hosts the parasite spp. of gregarina from Roscoff and English Channel.

- M  
8-06336
- Marti, Iu. Iu.** (1962)  
*In* 8-06015 : 57-68

Nekotorye skhodstva i razlichiiia v usloviakh, sushchestvovaniia boreal'nykh vidov ryb v severo-vostochnykh i severo-zapadnykh raionakh Atlantiki (Some similarities and differences in conditions under which boreal fish species exist in north-west Atlantic). En

- M  
8-06337
- Popova, O. A.** (1962)  
*In* 8-06015 : 235-53

Nekotorye dannye po pitaniu treski v N'iufaundlenskom raione severo-zapadnoi Atlantiki (Some data on feeding of cod in the Newfoundland area of the north-west Atlantic). En

- M  
8-06338
- Sidorenko, I. N.** (1962)  
*In* 8-06015 : 255-61

Pitanie treski v vodakh zapadnoi Grenlandii (Feeding of cod in west Greenland waters). En

- M  
8-06339
- Kashintsev, M. L.** (1962)  
*In* 8-06015 : 263-71

K voprosu o pitanii okunia v raione N'iufaundlenda (Some notes on redfish in the Newfoundland area). En

- M  
8-06340
- Ianulov, K. P.** (1962)  
*In* 8-06015 : 273-83

Parazity kak indikatory lokal'nosti stad morskogo okunia (Parasites as indicators of local redfish stocks). En

- M  
8-06341
- Ianulov, K. P.** (1962)  
*In* 8-06015 : 285-96

O gruppirovkakh okunia-kliuvacha (*Sebastes mentella* Travin) v Labradorsko-N'iufaundlenskom raione (On groups of redfish (*Sebastes mentella* Travin) in Labrador-Newfoundland area). En

- M  
8-06342
- Surkova, E. I.** (1962)  
*In* 8-06015 : 297-311

Razmerno-vozrastnoi sostav okunia-kliuvacha severo-zapadnoi Atlantiki (Size and age composition of redfish (*Sebastes mentella* Travin) in the north-west Atlantic). En

- M  
8-06343
- Surkova, E. I.** (1962)  
In 8-06015 : 313-8  
Strukturnye osobennosti cheshum okunia-kliuvacha severo-zapadnoi Atlantiki (Peculiarities in scale structure of redfish (*Sebastes mentella* Travin) from the north-west Atlantic). En
- M  
8-06344
- Zakharov, G. P.** (1962)  
In 8-06015 : 319-30  
O biologii zolotistogo okunia zapadnoi Grenlandii (On the biology of redfish (*Sebastes marinus* L.) in west Greenland). En
- M  
8-06345
- Mankevich, E. M.** (1962)  
In 8-06015 : 331-43  
Biologicheskie osobennosti treski s razlichnoi strukturoi otolitov v severo-zapadnoi Atlantike (Biological peculiarities of north-west Atlantic cod differing in otolith structure). En
- M  
8-06346
- Postolakii, A. I.** (1962)  
In 8-06015 : 345-54  
Biologiya treski raiona Labradora i N'iufaundlenda (Some data on biology of cod from Labrador and Newfoundland areas). En
- M  
8-06347
- Mankevich, E. M. & V. S. Prokhorov** (1962)  
In 8-06015 : 355-60  
Razmerno-vozzrastnoi sostav i nerest treski na iugo-zapadnom sklone banki Flemish-Kap (On the biology of cod on the southwestern slope of Flemish Cape). En
- M  
8-06348
- Ianulov, K. P.** (1962)  
In 8-06015 : 361-6  
O vozraste i roste kambaly-ersha v severo-zapadnoi Atlantike (On age and growth of American plaice in the north-west Atlantic). En
- M  
8-06349
- Iudanov, I. G.** (1962)  
In 8-06015 : 367-75  
Sel'devye severo-zapadnoi chasti Atlanticheskogo okeana (Herring of the north-west Atlantic). En
- M  
8-06350
- Rojas, E., de Mendiola, B.** (1962)  
Thesis, Universidad Nacional Mayor de San Marcos, Lima, Facultad de Ciencias, Escuela de Ciencias Biologicas, 38 p.  
Abundancia de los huevos de anchoveta (*Engraulis ringens* Jenyns) con relación a la temperatura de mar, en la región de Chimbote (Abundance of eggs of anchovy (*Engraulis ringens* Jenyns) in relation to sea temperature in the region of Chimbote). Pr

- Da Costa, F. Correia** (1962) M  
8-06351  
*Notas Cent. Biol. pisc., Lisboa*, (27) : 24 p.

Contribuição para o estudo dos atuns do arquipélago de Cabo Verde (Contribution to the study of the tuna from Cape Verde archipelago). *Pr*

Co 61-02895. Refers to preliminary results of exploratory live bait fishing and contains information of spp. caught, sex-ratio and maturity, particularly of *Neothunnus albacora* and *Katsuwonus pelamis*.

- Racadot, J.** (1962) M  
8-06352  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Comparison of several cell types of the anterior lobe of seal (*Leptonychotes weddelli*) pituitary with those of the sheep, particularly during gestation and lactation

Do 61-295me.

- Nishiwaki, M.** (1962) M  
8-06353  
*Norsk Hvalfangst-tid*, 51 (10) : 395-8  
Aerial photographs show sperm whales' interesting habits

- Midtunn, L. & I. Hoff** (1962) M  
8-06354  
*Fiskeridir. Skr. Havundersøk*, 13 (3) : 18 p.  
Measurements of the reflection of sound by fish

Measures sound reflectivity of cod and coal fish under natural conditions, especially that of their dorsal reflectivity as a function of orientation, measured in absolute units.

- Ivanov, L. S.** (1960) M  
8-06355  
*Trud. nauch.-izsled. Inst. Rib. Prom. Varna*, 2 : 5-11  
Otnosno vuzmnoshostite za obratno razchitane na tegloto na cherno-morskata skumriia (About the possibility of inverse weight calculation of the Black Sea scomber). *Bu En*

- Kuneva-Abadzhieva, V. & T. Marinov** (1960) M  
8-06356  
*Trud. nauch.-izsled. Inst. Rib. Prom. Varna*, 2 : 41-71  
Khrana na niakoi bentosoiadni ribi (barbunia, medzhid, pisiia) (Nutrition of some benthic-feeding fishes (mullet, *Mullus barbatus ponticus* Essipov, whiting—*Odontogadus merlangus euxinus* Nordm. and the flounder—*Pleuronectes fesus luscus* Pallas)). *Bu Fr*

- Margaritov, N. M.** (1960) M  
8-06357  
*Trud. nauch.-izsled. Inst. Rib. Prom. Varna*, 2 : 195-213  
Paraziti po niakoi nashi morski ribi (Parasites of some Bulgarian sea fishes). *Bu De*



- M  
8-06358
- Hanyu, I. & M. A. Ali** (1960)  
*Nature, Lond.*, 196 (4854) : 554-6  
 Intra-sub-specific variation in retinal structure in *Sebastes marinus mentella*  
 Account of investigation of retinal structure in fish of western North Atlantic where a marked variation in the size of the retinal cones was observed in *Sebastes marinus mentella*. Relates this difference to the depths from which the specimens were collected.
- M  
8-06359
- Zubkova, N. A.** (1962)  
*Dokl. Akad. Nauk SSSR*, 147 (2) : 502-4  
 Sluchai partenogeneticheskoi aktivatsii ikry kamchatskogo kraba (*Paralithodes camchatica*) soderzhavshegosia v akvariume (A case of parthenogenetic activation of the eggs of *Paralithodes camchatica* kept in an aquarium)
- M  
8-06360
- Novikova, N. S.** (1962)  
*Dokl. Akad. Nauk SSSR*, 146 (4) : 960-2  
 Nekotorye dannye po pishchevym ratsionam treski i pikshi Barentseva moria (Some data on the food rations of the Barents Sea cod and haddock)
- M  
8-06361
- Novikov, N. P.** (1962)  
*Dokl. Akad. Nauk SSSR*, 147 (1) : 215-6  
 O veroiatnosti ginogeneza u amerikanskogo strelozubogo paltusa (*Atheresthes stomias* Jord. et Gilb.) v Beringovom more (The probability of gynogenesis in the *Atheresthes stomias* in the Beringian Sea)
- M  
8-06362
- Tønnesen, J. N.** (1962)  
*Norsk Hvalfangst-tid.*, 51 (12) : 473-80  
 A great work on whales  
 Re 8-12002. Review of historical section of English translation of 'Whales' by E. J. Slijper.
- M  
8-06363
- Papenfuss, H. J.** (1961)  
*Fischereiforsch.*, 4 (3) : 25-6  
 Zur Verteilung des Vitamins A in der Dorschleber (The distribution of vitamin A in cod liver)
- M  
8-06364
- Pozdnyakov, Yu. F.** (1962)\*  
 M. 3690  
 Some data on the biology and fishery of the Barents Sea capelin  
 En 60-5791. Available from National Lending Library, Boston Spa, Yorkshire.

- Baranenkova, A. S., V. P. Ponomarenko & V. P. Serebriakov** M  
(1962) 8-06365  
*Vopr. Ikhtiolog.*, 1 (22) : 18-24  
Shipokhvostyi skat (*Raja spinicauda* Iensen) v Barentsevom more (Thorn-tail skate (*Raja spinicauda* Iensen) in the Barents Sea)
- Postolakii, A. I.** M  
(1962) 8-06366  
*Vopr. Ikhtiolog.*, 1 (22) : 25-8  
Nakhodka *Anotopterus pharao* Zugmayer (Pisces, Scopeliformes) v Severnoi Atlantike (On the occurrence of *Anotopterus pharao* Zugmayer (Pisces, Scopeliformes) in the North Atlantic)
- Mathisen, O. A.** M  
(1962) 8-06367  
*Vopr. Ikhtiolog.*, 1 (22) : 42-54  
Sravnitel'naya karakteristika vozrasta i rosta krasnoi *Oncorhynchus nerka* (Walb.) Kuril'skogo ozero, Kamchatki i Bristol'skogo zaliva Aliaski (Comparative characteristics of age and growth of the red salmon (*Oncorhynchus nerka* Walb.) in lake Kuril, Kamchatka and in Bristol Bay, Alaska)
- Anukhina, A. M.** M  
(1962) 8-06368  
*Vopr. Ikhtiolog.*, 1 (22) : 55-68  
Materialy po ekologii belomorskoj navagi *Eleginus navaga* (Pall.) (The biology of the White Sea navaga (*Eleginus navaga*))
- Iudanov, I. G.** M  
(1962) 8-06369  
*Vopr. Ikhtiolog.*, 1 (22) : 69-72  
Stepen' urozhnosti atlanticheskoscandinavskikh sel'dei v 1960 g. po dannym ucheta ikh segoletkov v Barentsevom more (On the quantity of the recruitment of Atlantoscandian herrings in 1960 according to the countings of fingerlings in the Barents Sea)
- Sokolov, V. A.** M  
(1962) 8-06370  
*Vopr. Ikhtiolog.*, 1 (22) : 73-8  
Rasovaia prinadlezhnost' molodi sel'di zaliva Aniva (Race belonging of young herrings in Aniva Bay)
- Bykov, N. E.** M  
(1962) 8-06371  
*Vopr. Ikhtiolog.*, 1 (22) : 100-3  
Plodovitost' aral'skoi salaki (*Clupea harengus membras* L.) (Fecundity of the Aral Sea herring (*Clupea harengus membras* L.))
- Anokhina, L. E.** M  
(1962) 8-06372  
*Vopr. Ikhtiolog.*, 1 (22) : 140-57  
O kol'tsakh i nerestovykh otmetkakh na cheshue belomorskoj sel'di (*Clupea harengus pallasi maris-albi* Berg) (On rings and spawning marks on scales of the White Sea herrings (*Clupea harengus pallasi maris albi* Berg.))

**Anwand, K.** (1961)M  
8-06373*Z. Fisch.*, 10 (4/5) : 383-6Ein weiterer Fund eines Heringszwitters (*Clupea harengus* L.) (A further discovery of a herring hermaphrodite). En Ru

Describes specimen from Greifswalder Bodden.

**Buttiaux, R.** (1962)M  
8-06374*In* 8-06045 : 503-19*Salmonella* problems in the sea

Discusses the topic under chapters: Self-cleansing of the sea; Survival of Salmonellae and other enterobacteria in sea water; Behaviour of Salmonellae and other enterobacteria within the body of marine fish; Salmonellosis caused by fish intake; Salmonellae in edible shellfish; Salmonellae in fish and shellfish. Incl. bibliographic list.

**Oppenheimer, C. H.** (1962)M  
8-06375*In* 8-06045 : 541-72

On marine fish diseases

Discusses the topic under chapters: Methods of study, Bacterial diseases; Virus diseases; Fungi; Protozoans; Larger parasites; Atypical cell growth; Therapy of marine fish disease; General relationships. Incl. bibliographic list.

**Brawn, V. M.** (1961)\*M  
8-06376*Behaviour*, 18 : 239-55Sound production by the cod (*Gadus callarias* L.)

Male and female cod greater than 37 cm in total length heard to produce a low grunting sound in captivity. Sounds in captured cod are produced most frequently in February and March which is associated with spawning and from September to November when they are very aggressive. Sound production in relation to electrical stimulation, fright and temperature are reported.

**De Mets, R.** (1962)MG  
8-06377*Nature, Lond.*, 196 (1962) : 77-8

Submicroscopic structure of the peritrophic membrane in arthropods

Investigations with electron microscope on structure of this membrane reported.

**Chester, J.** (Ed.) (1960)\*MF  
8-06378*Symp. zool. Soc. Lond.*, (1) : 181 p.

Hormones in fish. Proceedings of a Symposium held at the Zoological Society of London, Regent's Park, London N.W.1, on 13th October 1959

- Delaware University. Department of Biological Sciences** (1960) MF 8-06379  
*Estuar. Bull.*, 5 (2) : 15 p.

Contains notes and short articles dealing with studies of natural history and fisheries of *Limulus polyphemus*, and mangroves, the tidal marshes of the tropics in vicinity of Delaware Laboratory.

- Bishai, H. M.** (1962) MF 8-06380  
*Salm. Trout. Mag.*, (165) : 111-4  
 Hydrocoele embryonalis in salmonids (yolk-sac disease)

Reviews literature; describes investigations on *Salmo salar*, *S. trutta*, and *S. t. fario*.

- Hovlid, N. G.** (d.u.) MF 8-06381  
 B.P. 828,076  
 Purification, aeration and filtration of water in an aquarium

WPA 35 (9) 1718.

- Brown, V. M.** (1962) MF 8-06382  
 U.K. Atom. Energ. Auth., PG-Rep.-288 : 16 p.

The accumulation of strontium-90 and yttrium-90 from a continuously flowing natural water by eggs and alevins of the Atlantic salmon and the sea trout

WPA 35 (9) 1876.

- Olivereau, M.** (1962) MF 8-06383  
*Gen. comp. Endocr.*, 2 (6) : 565-73

Modification de l'interrénal du smolt (*Salmo salar* L.) au cours du passage d'eau douce en eau de mer (Modification in interrenal cells of smolt (*Salmo salar* L.) during the passage from fresh water to sea water)

- von Harnack, M. & K. Lederis** (1962) MF 8-06384  
 Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Fine structure of the hypothalamo-neurohypophyseal secretory neurones

Do 61-295me. Investigate fine structure of the preoptic neurosecretory cells of *Gadus morrhua*, *Cottus bubalis*, *Salmo irideus*.

- Fänge, R. & E. Östlund** (1962) MF 8-06385  
 Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

Biological effects of a crustacean eyestalk substance

Do 61-295me.



- Kolarov, P. P.** (1960) MF  
8-06386  
*Trud. nauch.-izsled. Inst. Rib. Prom. Varna*, 2 : 13-34  
Niakoi biologichni nabludeniiia vurkhu chernomorskiia karag'oz (*Alosa kessleri pontica* Eichw.) (Some biological observations on the Black Sea shad, *Alosa kessleri pontica* Eichw.). Bu Fr
- Datta Gupta, A. K. et al.** (1961)\* MF  
8-06387  
*Proc. Rajasthan Acad. Sci.*, 8 : 129-39  
Annotated list of fishes of Rajasthan  
BSEA 8 (8) 5083.
- Moriarty, C.** (1960) MF  
8-06388  
*Nature, Lond.*, 196 (4854) : 595  
Movement of salmon  
Reports the recapture of tagged *Salmo salar* (L.) caught at sea by drift nets off the North Mayo coast and marked with a Lea's hydrostatic tag, near Ängelholm in southern Sweden.
- Luk'ianenko, V. I. & E. K. Miserova** (1962) MF  
8-06389  
*Dokl. Akad. Nauk SSSR*, 146 (4) : 971-4  
Sravitel'no-immunologicheskoe izuchenie komplementarnoi funktsii krovi ryb (A comparative-immunological study of the complementary function of blood in fish)
- Tesch, F. W.** (1961) MF  
8-06390  
*Dtsch. Fisch.-Ztg.*, 8 (5) : 135-7  
Über die Rentabilität des Einsatzes von Zandersetzlingen (*Lucioperca lucioperca* L.) in den Bützsee/Neuruppin (On the rentability of stocking with perch-pike fingerlings in the Bützsee/Neuruppin)
- Woynárovich, E.** (1960) MF  
8-06391  
*Z. Fisch.*, 9 (1/2) : 73-83  
Aufzucht der Zanderlarven bis zum Raubfischalter (Rearing of pike-perch larvae until they turn predatory fish). En Ru
- Molnár, G.** (1960) MF  
8-06392  
*Z. Fisch.*, 9 (1/2) : 101-6  
Methode der Blutentnahme für haematologische Untersuchungen bei Fischen (Blood taking method for haematological investigations of fishes). En Ru
- Schiemenz, F.** (1960) MF  
8-06393  
*Z. Fisch.*, 9 (1/2) : 133-54  
Unterschied der Wanderungen der Fische, insbesondere der Aale verschiedenen Reifegrades, im unkanalisierten Strom und im kanalisierten Strom und die Bedeutung der Fischtreppe (Differences in the migration of fishes, especially of eels in different stages of maturity, in canalized and uncanalized streams and the importance of fish ladders). En Ru

- Krykhtin, M. L. & A. G. Smirnov** (1962) MF  
*Vopr. Ikhtiol.*, 1 (22) : 29-41 8-06394  
 O vzaimosviahichislennosti i kachestvennykh lososei pokazatelei nerestovych stad amurskikh (On the interrelation of number and conditions indices of spawning stocks of the Amur salmon)
- Demin, L. Z.** (1962) MF  
*Vopr. Ikhtiol.*, 1 (22) : 90-9 8-06395  
 Poluprokhodnye ryby del'ty Tereka (Semimigratory fishes of the Terek delta)
- Ivlev, V. S.** (1962) MF  
*Vopr. Ikhtiol.*, 1 (22) : 158-68 8-06396  
 Aktivnyi energeticheskii obmen u mal'kov bal'tiiskogo lososia (*Salmo salar* L.) (Active energy metabolism in young Baltic salmon (*Salmo salar* L.))
- Girsa, I. I.** (1962) MF  
*Vopr. Ikhtiol.*, 1 (22) : 183-91 8-06397  
 Vliianie izmeniaiushcheisia osveshchennosti na dostupnost' kormovykh organizmov dlia khishchnykh ryb raznykh ekologicheskikh grupp (The influence of changing of illumination upon accessibility of food organisms for predatory fish of different ecological groups)
- Švob, T.** (1959)\* MF  
*Rib. Jugosl.*, (14/4) : 81-5 8-06398  
 Some advantages and difficulties in the investigation of the alimentary tract of fishes by a modified roentgenologic method
- Tesch, F. W.** (1959) MF  
*Z. Fisch.*, 8 (7/8) : 587-96 8-06399  
 Die Zanderlaichverhältnisse (*Lucioperca lucioperca* L.) auf Grund von Laichnestkontrollen im Müggelsee (Spawning conditions of pike-perch (*Lucioperca lucioperca* L.) based on the controls of spawning nests in the Müggelsee). En Ru
- Thurrow, F.** (1959) MF  
*Z. Fisch.*, 8 (7/8) : 597-626 8-06400  
 Über Fangerträge und Wachstum des Aales in der westlichen Ostsee (Yields and growth of eels in the western Baltic). En Ru  
 Deals with the importance to fishery, growth food, the border between the maturing eel and adult eel state, and the sex ratio of *Anguilla anguilla*

**Steffens, W.** (1960)MF  
8-06401*Z. Fisch.*, 9 (3/4) : 161-272Ernährung und Wachstum des jungen Zanders (*Lucioperca lucioperca* L.) in Teichen (Food and growth of the young pike-perch *Lucioperca lucioperca* L. in ponds). En Ru

Investigations carried out in various ponds in Lusatia. Contents of stomach and intestine showed that pike-perch feed usually on invertebrates. Tables given. Growth and weight related to quality and quantity of food and to stocking density. Producing simultaneously food carps and one-year-old pike-perch may increase considerably the economy of pond fishculture. Bibliography.

**Ivlev, V. S.** (1962)\*MF  
8-06402*Zh. obshch. Biol.*, 23 : 72-3

Smoltifikatsiia lososevykh i es biologicheskoe znachenie (Smoltification of salmon and its biological significance)

**Janković, D.** (1964)F  
8-06403*FAO Fish. Synops.*, (24 Rev. 1) : 45 p.Synopsis of biological data on European grayling *Thymallus thymallus* (Linnaeus) 1758

NE 62-02715.

**Deelder, C. L. & J. Willemsen** (1964)F  
8-06404*FAO Fish. Synops.*, (28) : 52 p.Synopsis of biological data on pike-perch *Lucioperca lucioperca* (Linnaeus) 1758

Reviews information on identity, distribution, bionomics, and life history, population and exploitation of this sp. in European and adjacent inland waters. Incl. a comprehensive bibliography on the subjects reviewed.

**Frey, H.** (1959)F  
8-06405

Radebeul, Neumann Verlag, 600 p.

Das Aquarium von A bis Z (The aquarium from A to Z)

NE 586764.

**Woynárovich, E.** (1959)\*F  
8-06406*Acta biol. Acad. Sci. hung.*, 3 : 18 p.

Oxygen consumption of aquatic animals at various temperatures

**Behrend, E. R. & M. E. Bitterman** (1961)F  
8-06407*Amer. J. Psychol.*, 74 : 542-51

Probability-matching in the fish

PA 36 (4) 4EL42B. Account of experiments with African mouthbreeders. Finds an important functional difference between fish and mammal.

- Gonzales, R. C., N. Longo & M. E. Bitterman** (1961) F  
8-06408  
*J. comp. physiol. Psychol.*, 54 : 452-6

Classical conditioning in the fish: exploratory studies of partial reinforcement

PA 36 (4) 4EL52G. Measures the generalized activity of goldfish and discusses results in relation to experiments on the partial-reinforcement effect in other spp.

- Warsaw. Instytut Rybactwa Śródlądowego** (1961) F  
8-06409  
 Warszawa, Państwowe Wydawnictwo Rolnicze i Leśne, 1 v. in 3 parts  
 Monografia biologiczno-gospodarcza troci (*Salmo trutta morpha lacustris* L.) jeziora Wdzydze . . . Lake-trout of Wdzydze Lake. Ru En

Incl. bibliographies.

- Mann, T. & E. D. Wilson** (1962) F  
8-06410  
*J. Endocrin.*, 25 (3) : 407-8

Biochemical observations on the male accessory organs of nutria *Myocastor coypus* (Molina)

- Anon.** (1962) F  
8-06411  
*Colon. annu. Rep. (Sarawak)*, 66-7  
 Freshwater fisheries

TA (6) j3155. The main species cultivated are: *Tilapia mossambica*, *Trichogaster pectoralis* and *Cyprinus carpio*.

- Anon.** (1962) F  
8-06412  
*Rep. E. Afr. agric. Fish. Res. Coun.*, 38-48  
 East African freshwater fishery research organization

TA (6) j3151. A discussion on the fisheries of Lake Victoria and pond-fisheries. For the first time for any tropical fresh water fishery a method has been found, making rational fish-exploitation possible based on parameters of fish growth, fishing effort, fecundity and net selectivity. Species discussed are *Tilapia zillii*, *T. variabilis*, *T. esculenta* and the predator *Bagrus docmac*.

- Anon.** (1962) F  
8-06413  
*Colon. annu. Rep. (Jamaica)*, 341-2  
 Inland fisheries

TA (6) j3152. It is estimated that the area of water producing *Tilapia mossambica* in Jamaica exceeds 600 ha.



- F  
8-06414
- Inger, R. F. & Chin Phui Kong** (1962)  
*Fieldiana, Zool.*, 45 : 1-268  
 The fresh-water fishes of North Borneo
- TA (6) : j3154. Basic information on the fishes now known in North Borneo is followed by ecological information obtained at 12 observation stations. *Tilapia mossambica* is now the most popular fish for rearing in ponds.
- F  
8-06415
- Groenewald, A. A. v. J.** (1961)  
*Fauna & Flora*, (12) : 47-55  
*Clarias*, the freshwater barbel. Af
- Popular account of this catfish (morphology, physiology, ecology, etc.) with special reference to South Africa.
- F  
8-06416
- Lombard, G. L.** (1961)  
*Fauna & Flora*, (12) : 79-85  
 The first introduction and production of Aischgrund carp in South Africa. Af
- Refers to *Cyprinus carpio* (Dinkelsbühl variety).
- F  
8-06417
- Wundsch, H. H.** (1960)  
*Dtsch. FischZtg.*, 7 (7) : 193-4  
 Karpfen und Enten (eine Einführung) (Carp and ducks (an introduction))
- Comprehensive review of association between water poultry and fish.
- F  
8-06418
- Zobel, H.** (1960)  
*Dtsch. FischZtg.*, 7 (7) : 195-  
 Die Entenproduktion der Binnenfischerei im Jahre 1959 (The duck production of inland fisheries in 1959)
- Comprehensive review of association between water poultry and fish.
- F  
8-06419
- Blume, H.** (1960)  
*Dtsch. FischZtg.*, 7 (7) : 196-204  
 Entenmast in Verbindung mit der Karpfenzucht (Fattening of ducks in connection with carp rearing)
- Comprehensive review of association between water poultry and fish.
- F  
8-06420
- Hoffman, Suchowerow & H. Weisflog** (1960)  
*Dtsch. FischZtg.*, 7 (7) : 213-24  
 Die kombinierte Enten- und Fischwirtschaft Gjelka (The combined ducks and fish farm Gjelka)
- Comprehensive review of association between water poultry and fish.

- F  
8-06421
- Schiffman, R. H.** (1961)  
U.S. Atom. Energ. Comm., HW-72107 : 12 p.  
The uptake of strontium from diet and water by rainbow trout  
WPA 35 (9) 1875.
- F  
8-06422
- Hochachka, P. W.** (1962)  
*Gen. comp. Endocr.*, 2 (6) : 499-505  
Thyroidal effects on pathways for carbohydrate metabolism in a teleost  
Tests the influence of thyroxine and 3,5,3'-triiodothyronine on the metabolism of gluconate-1-C<sup>14</sup> and acetate-1-C<sup>14</sup> in *Salvelinus fontinalis*.
- F  
8-06423
- Combescot, C. & J. Demaret** (1962)  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962  
The histophysiology of the epiphysis in the water turtle, *Emys leprosa* Schw.  
Do 61-295me.
- F  
8-06424
- Follett, B. K. & H. Heller** (1962)  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962  
The neurohypophysial hormones of the African lungfish (*Protopterus aethiopicus*)  
Do 61-295me.
- F  
8-06425
- Thornburn, C. C. & A. J. Matty** (1962)  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962  
Effect of thyroxine on some aspects of nitrogen metabolism in the goldfish, *Carassius auratus*  
Do 61-295me.
- F  
8-06426
- Swift, L. D. R. & G. E. Pickford** (1962)  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962  
Seasonal variations in the growth hormone content of pituitary glands of the perch, *Perca fluviatilis*  
Do 61-295me.

- Reinboth, R.** (1962) F  
8-06427  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962

The effects of testosterone on female *Coris julis* (L.), a wrasse with spontaneous sex-inversion

Do 61-295me.

- Bard, J.** (1962)\* F  
8-06428  
*Bois For. Trop.* : 31-47  
Où en est actuellement la pisciculture africaine? (What is the actual situation of African fishculture?)

- Gonzalo, J. Arroyo, S. J.** (1962) F  
8-06429  
*FAO Fish. Pap.*, (21) : 22 p.

Fish pond development planning with the help of linear programming

Mathematical presentation of the linear programming technique; discussion of significance of this technique and detailed presentation of different models for fish pond operations; and description of different features of possible research into production functions in fish pond operations.

- Harrold, L. L. et al.** (1962) F  
8-06430  
*Tech. Bull. U.S. Dept. Agric.*, (1256) : 194 p.

Influence of land use and treatment on the hydrology of small watersheds at Coshocton, Ohio, 1938-1957

This study takes the initial steps in developing concepts and techniques that may aid in understanding how several levels of land management for crop and timber production have affected streamflow from a set of small, mixed-cover watersheds at the Soil and Water Conservation Research Station near Coshocton, Ohio. An analysis based on these developed techniques or concepts is tested and the results are discussed. Details of the research installations at the Coshocton station, physical characteristics of the area, and a climatic description are given in part 2.

- Bulkley, R. V.** (1961) F  
8-06431  
*Res. Rep. U.S. Fish Serv.*, (54) : 31 p.

Fluctuations in age composition and growth rate of cutthroat trout in Yellowstone Lake

- Ball, O. P. & O. B. Cope** (1961) F  
8-06432  
*Res. Rep. U.S. Fish Serv.*, (55) : 62 p.

Mortality studies on cutthroat trout in Yellowstone Lake

- Shell, E. W.** (1961) F  
8-06433  
*Res. Rep. U.S. Fish Serv.*, (57) : 36 p.

Chemical composition of blood of smallmouth bass

**Lambou, V. W.** (1962)

F  
8-06434

*J. Wildlife Mgmt*, 26 (2) : 193-202

Distribution of fishes in lake Bistineau, Louisiana

Population sampled by use of rotenone to determine if fishes were randomly distributed.

**Heintz, E.** (1962)

F  
8-06435

*C.R. Acad. Sci., Paris*, 255 (23) : 3241-3

Le potentiel électrique de la muqueuse olfactive des poissons, du veau et du porc, en fonction de la concentration de solutions aqueuses olfactives (The electric potential of the olfactory tissue of fish, veal and pork, in relation with the aqueous solution concentration of olfactories)

Preliminary note on a comparative study based on experiments with *Danio malabaricus*, *Carassius carassius*, *Rhodeus amarus*.

**Shul'man, G. E.** (1962)

F  
8-06436

*Dokl. Akad. Nauk SSSR*, 147 (3) : 724-6

Elementy azotnogo balansa i pishchevye ratsiony azovskoi khamsy (*Engraulis encrasicolus maeoticus* Pusanov) (Elements of protein equilibrium and the food rations of *Engraulis encrasicolus maeoticus* Pusanov)

**Ostroumova, I. N.** (1962)

F  
8-06437

*Dokl. Akad. Nauk SSSR*, 147 (1) : 263-4

O pervom poiavlenii gemoglobina u embrionov raduzhnoi foreli (*Salmo irideus* Gibbons) (The first appearance of haemoglobin in embryos of *Salmo irideus* Gibbons)

**Gundrizer, A. I.** (1962)

F  
8-06438

*Izv. sib. Otd. Akad. Nauk SSSR*, (3) : 111-9

K biologii siga pravdina iz Teletskogo ozera i reki Bii (On the biology of *Coregonus pravdinellus* from lake Teletskie and river Bija)

Ill. morphological characteristics.

**Wunder, W.** (1961)

F  
8-06439

*Fischwirt*, 11 (6) : 144-50

Vorschläge zur planmässigen Bekämpfung der Bauchwassersucht durch Entseuchung im Bundesgebiet (Proposals for a regular control of ascites by means of disinfection in the Federal Republic)

**Schäperclaus, W.** (1961)

F  
8-06440

*Dtsch. Fisch.-Ztg.*, 8 (5) : 137-44

Aus der Teichwirtschaft Jugoslawiens (Pond management in Jugoslavia)



- F  
8-06441
- Kozianowski, A.** (1961)  
*Dtsch. Fisch.-Ztg.*, 8 (5) : 144-50  
 Kostenanalyse und Rentabilität der künstlichen Maränenenerbrütung in Brutanstalten (Expenditure and rentability of artificial breeding of *Coregonus albula*)

- F  
8-06442
- Brunner, G. & H. Reichenbach-Klinke** (1961)  
*Allg. FischZtg.*, 86 (10) : 310-1  
 Beitrag zur Fleckenseuche des Hechtes (Contribution to the spot disease in pike)

Probably caused by *Pseudomonas punctata*.

- F  
8-06443
- Schäperclaus, W.** (1961)  
*Dtsch. Fisch.-Ztg.*, 8 (4) : 110-6  
 Steigerung der Erträge in der Teichwirtschaft (Increased yields in pond management)

- F  
8-06444
- Libosvářský, J.** (1961)  
*Dtsch. Fisch.-Ztg.*, 8 (4) : 120-4  
 Forellenzucht in der Tschechoslowakei (Trout breeding in Czechoslovakia)

- F  
8-06445
- Müller, W.** (1960)  
*Z. Fisch.*, 9 (1/2) : 1-72  
 Beiträge zur Biologie der Quappe (*Lota lota* L.) nach Untersuchungen in den Gewässern zwischen Elbe und Oder (Contributions to the biology of *Lota lota* L. according to the researches carried out in the waters between Elbe and Oder). En Ru

Ill. description of growth, reproduction, and food utilization.

- F  
8-06446
- Hnatevič, B.** (1960)  
*Z. Fisch.*, 9 (1/2) : 85-93  
 Das Wachstum des Barsches (*Perca fluviatilis* L.) in dem Orava-Staubecken (Slovakia) (The growth of perch (*Perca fluviatilis* L.) in the Orava reservoir (Slovakia). En Ru

- F  
8-06447
- Faktorowitsch, K.** (1960)  
*Z. Fisch.*, 9 (1/2) : 95-9  
 Über das Wesen des Stoffes, der sich in der Leber der Regenbogenforelle bei der sogenannten lipoiden Degeneration der Leber ablagert (The substance settling at the so-called lipid degeneration in the liver of rainbow trout). En Ru

This substance is to be regarded as ceroid, formed in the liver of trout owing to the self-oxidation of unsaturated fatty acids being pathologically accumulated in it.

**Pevzner, R. A.** (1962)

F

8-06448

*Dokl. Akad. Nauk SSSR*, 147 (5) : 1187-90

Tsito-gistokhimicheskie issledovaniia vkusovykh lukovits kostistyykh ryb (*Cyprinus carpio* i *Carassius carassius*) (Cytohistochemical investigations of the taste bulbs in Teleostei (*Cyprinus carpio* and *Carassius carassius*))

**Strelkov, Iu. A.** (1962)

F

8-06449

*Dokl. Akad. Nauk SSSR*, 147 (5) : 1253-5

O novom vide monogeneticheskogo sosal'shochika *Acolpenteron petruschewskyi* prisposobivshemsia k obitaniiu v vydelitel'noi sisteme gorchakov (On a new species of monogenetic trematode—*Acolpenteron petruschewskyi*, adapted to the existence in the excretory system of cyprinoid fish)

**Bolgin, V. M.** (1962)

F

8-06450

*Vopr. Ikhtiol.*, 1 (22) : 79-88

Morfologicheskie osobennosti leshcha, akklimatizirovannogo v ozere Ubinskom (Morphological peculiarities of bream acclimatised in the Ubinskoie Lake)

**Fedorov, V. G.** (1962)

F

8-06451

*Vopr. Ikhtiol.*, 1 (22) : 89-

Nakhozhdenie bychka-podkamenshchika (*Cottus gobio* L.) v zapadnoi Sibiri (On the occurrence of common sculpin (*Cottus gobio* L.) in western Siberia)

**Cherfas, N.B.** (1962)

F

8-06452

*Vopr. Ikhtiol.*, 1 (22) : 104-15

Radiatsionnoe porazhenie gonad karpa (Influence of radiation on gonads of carp)

**Vladimirov, V. I.** (1962)

F

8-06453

*Vopr. Ikhtiol.*, 1 (22) : 116-26

Razmnozhenie rybtsa (*Vimba vimba carinata*) (Pall.) v Dnepre posle soorusheniia Kakhovskoi GES (Reproduction of *Vimba vimba carinata* (Pall.) in the Dneiper after the construction of the Kakhov hydroelectric power station)

**Soin, S. G.** (1962)

F

8-06454

*Vopr. Ikhtiol.*, 1 (22) : 127-39

Embrional'nye prisposobleniia k dykhaniiu u ryb i osobennosti ikh razvitiia u baikal'skikh bychkov-podkamenshchikov (Cottoidei) (Embryonic adaptations to respiration in fish and their peculiarities in the Baikal sculpins, Cottoidei)

**Bogatova, I. B.** (1962)

F

8-06455

*Vopr. Ikhtiol.*, 1 (22) : 169-73

Pitanie molodi semgi (*Salmo salar* L.) na rannikh stadiakh razvitiia pri vyrashchivanii v prudakh (Feeding of young salmon (*Salmo salar* L.) on early stages of development rearing in fishponds)

- Poposhev, S. I.** (1962) F  
8-06456  
*Vopr. Ikhtiol.*, 1 (22) : 174-82  
 O pitanii amurskogo belogo lescha (*Parabramis pekinensis* Bas.) (On feeding of the white bream (*Parabramis pekinensis* Bas.))

- Miller, J. & K. Buss** (n.d.) F  
8-06457  
 Pennsylvania Fish Commission, Conservation Education Commission, 26 p.  
 The age and growth of the fishes in Pennsylvania

SFA 7 (3) 5224. Includes age and growth studies of largemouth bass, smallmouth bass, bluegill, yellow perch, pumpkinseed, northern pike, muskellunge, black crappie, white crappie, walleye, redbreast sunfish, rock bass, brown trout, brook trout, rainbow trout and chain pickerel.

- Ishii, S.** (1961) F  
8-06458  
*J. Fac. Sci. Univ. Tokyo*, 9 (2) : 278-90  
 Effects of some hormones on the gestation of the top minnow

SFA 7 (3) 5239. In *Gambusia* sp. interval between successive deliveries were about 25 days at  $27.5 \pm 1.5^{\circ}\text{C}$ , under illumination for 15 hours per day. Administration of progesterone or mammalian gonadotrophins did not exert any noticeable effect on ovary. Treatment with estradiol benzoate induced premature release of embryos in females during late gestation period, and inhibited the growth of oocytes and sometimes caused death of developing embryos in the ovary of females at an early gestation period. Noxious effect on embryos was diminished by concurrent injections of ovine lactogenic hormone.

- Švob, T.** (1959)\* F  
8-06459  
*Acta ichthyol., Sarajevo*, (12) : 97-155  
 Radiographs of the digestive tract of some species of freshwater fish.

- Nümann, W.** (1961) F  
8-06460  
*Z. Fisch.*, 10 (4/5) : 241-52

Das Problem der Ertragssteigerung und Überfischung in der Blaufelchen-fischerei am Bodensee (The problem of increase in yield and overfishing in the blue char fisheries in lake Constance). En Ru

Optimum catches which do not endanger the stock are possible, when an adequate amount of food is supplied and the fishing rate is kept within bounds protecting largely the young fish in its best growing age and before reaching the maturity stage.

- Albrecht, M.-L. & F. W. Tesch** (1961) F  
8-06461  
*Z. Fisch.*, 10 (4/5) : 253-73

Das Wachstum der Bachforelle (*Salmo trutta fario* L.) in der Polenz in Abhängigkeit von verschiedenen Umweltbedingungen (The growth of trout (*Salmo trutta fario* L.) in the Polenz in dependency of several environmental factors). En Ru

Experiments carried out for a period of 5 years. Great amount of food animals, slow and moderate flow, big water area, tranquil pools and bays are advantageous for the growth.

- Ziemiankowski, W. B. & E. Cristea** (1961) F  
8-06462  
*Z. Fisch.*, 10 (4/5) : 275-98

Beobachtungen zur Ernährungsdynamik der Fische während des Winters (Observations on food dynamics in fishes during winter). En Ru

Examinations carried out in the lakes and flooded area of the lower Danube.

- Abrosow, V. & O. Bauer** (1961) F  
8-06463  
*Z. Fisch.*, 10 (4/5) : 299-307

Die Peledmaräne—ein neues Objekt der Fischwirtschaft (*Coregonus peled* (Gmelin))—a new object in fish management). En Ru

The marane, *Coregonus peled*, introduced as spawn from the lakes of western Siberia in 1953 proved a valuable breeding object in the northwestern regions of the USSR. References are given on the biotechnics for breeding this valuable fish.

- Lieder, U.** (1961) F  
8-06464  
*Z. Fisch.*, 10 (4/5) : 329-50

Untersuchungsergebnisse über die Grätenzahlen bei 17 Süßwasser-Fischarten (Results of investigations of intermuscular bones in 17 freshwater species). En Ru

- Müller, H.** (1959) F  
8-06465  
*Z. Fisch.*, 8 (7/8) : 565-86

Die Einbürgerung der Kleinen Maräne (*Coregonus albula* L.) im Scharmützelsee) (Restocking of white fish in the Scharmützelsee). En Ru

Eutrophic lakes present best conditions for the growth of *Coregonus albula* L. if they are stocked regularly.

- Merla, G.** (1959) F  
8-06466  
*Z. Fisch.*, 8 (7/8) : 627-34

Methodische Untersuchungen zur Eisenbestimmung in stark eisenhaltigen Teichböden (Methodological examinations of pond soils for the Fe-determination). En Ru



- F  
8-06467
- Barthelmes, D.** (1960)  
*Z. Fisch.*, 9 (3/4) : 273-80  
*Tetrahymena parasitica* (Penard 1922) Corliss 1952 als Parasit in Larven vom *Chironomus-plumosus*-Typ (*Tetrahymena parasitica* (Penard 1922) Corliss 1952 parasite in *Chironomus plumosus* larvae). En Ru
- F  
8-06468
- Müller, W.** (1960)  
*Z. Fisch.*, 9 (5/6) : 321-32  
Untersuchungen über die Nachwirkung einer im Vorjahr gegebenen Phosphatdüngung in Teichen (Investigations of the after-effect of a phosphate application from the preceding year in ponds). En Ru
- F  
8-06469
- Swarup, H.** (1959)  
*J. Genet.*, 56 (2) : 129-42  
Production of triploidy in *Gasterosteus aculeatus* (L.)
- F  
8-06470
- Swarup, H.** (1959)  
*J. Genet.*, 56 (2) : 143-55  
Effect of triploidy on the body size, general organization and cellular structure in *Gasterosteus aculeatus* (L.)
- F  
8-06471
- Swarup, H.** (1959)  
*J. Genet.*, 56 (2) : 156-60  
The oxygen consumption of diploid and triploid *Gasterosteus aculeatus* (L.)
- F  
8-06472
- Van Duijn, C., Jr.** (1962)  
*In* 8-06045 : 573-93  
Diseases of fresh-water fish  
Discusses the topic under chapters: Nonparasitic affections; Diseases of parasitic origin; Fish parasites and human food hygiene; Economic importance. Incl. bibliographic list.
- F  
8-06473
- Honma, Y. & J. J. Duyvené de Wit** (1962)  
*Canad. J. Zool.*, 40 (6) : 1013-7  
Unusual ovipositor development in a female hybrid between female *Acheilognathus tabira* and male *Acheilognathus limbata* (Cyprinidae, Teleostei)  
The abnormal female hybrid is described. Histomorphological data on the pituitary, thyroid, and adrenal glands are presented, and an attempt is made to relate them to ovipositor growth.
- F  
8-06474
- Campana-Rouget, Y.** (1962)  
*Résult. sci. Explor. hydrobiol. Kivu Edouard Albert*, 3 (4) : 3-61  
Nématodes de poissons (Fish nematodes)  
Taxonomic study of nematode parasites of fishes of lakes Albert, Edward and Kivu (Congo) listing species of parasites and hosts.

- F  
8-06475
- Jacquemart, S.** (1962)  
*Résult. sci. Explor. hydrobiol. Kivu Edouard Albert*, 3 (4) : 65-75  
Contribution à l'étude de la faune trichoptérologique africaine. Trois trichoptères nouveaux du lac Tanganika (Contribution to the study of the African trichopterological fauna. Three new trichoptera of lake Tanganyika)
- Lists the spp. collected from the lakes and describes *Leptocerus fuscus*, *L. bispinosus* and *Protomacronema tanganikae* n. spp.
- FG  
8-06476
- Gonzalez, R. C., R. M. Eskin & M. E. Bitterman** (1961)  
*Amer. J. Psychol.*, 74 : 561-8  
Alternating and random partial reinforcement in the fish, with some observations on asymptotic resistance to extinction
- PA 36 (4) 4EL61G. Reports studies comparing African mouthbreeders and rat with respect to partial reinforcement.
- FG  
8-06477
- Ferguson, D. R. et al.** (1962)  
Abstract of paper presented at the Conference of the European Endocrinologists, September 20-22, 1962  
The distribution of neurohypophyseal hormones in Suiformes
- Do 61-295me. Studies posterior pituitary glands of some members of the Suiformes incl. *Hippopotamus* from Uganda.
- FG  
8-06478
- Kafiani, K. A. & M. Ia. Timofeeva** (1962)  
*Biokhimiia (En. Transl.)*, 27 (5) : 938-42  
Neorganicheski ortofosfat i fosfoproteiny v embrional'nom razvitii v'una *Misgurnus fossilis* L. (Inorganic orthophosphate and phosphoproteins in the embryonal development of *Misgurnus fossilis* L.). En

## MISCELLANEOUS AND AUXILIARIES

- M  
8-06479
- Scheer, G.** (1959)\*  
*Atoll. Res. Bull.*, 69 : 1-4  
Contribution to a German reef-terminology
- M  
8-06480
- Davies, D. H. & G. D. Campbell** (1962)  
*J.R. nav. med. Serv.*, 48 (3) : 27 p.  
The aetiology, clinical pathology and treatment of shark attack
- Based on observations in Natal, South Africa.

- Kornicker, L. S. (1961)** M  
8-06481  
*J. Soil Wat. Conserv.*, 16 (5) : 214-6  
Utilizing the natural resources of the sea

World conferences dealing with population growth and food supplies have repeatedly emphasized that great weight should be given to increasing the production of protein food from the sea. If living and mineral resources are to be utilized effectively, more intensive program of fundamental and applied research must be initiated. This article, slightly revised, is text of the author's presentation at the Dec. 1960 meeting of the American Association for the Advancement of Science, Section E, geology and geography. Issued also as: *Contr. Oceanogr. Met. A, and M. Coll. Tex.*, 1960-1961, (178).

- Wilson, B. W. (1961)** M  
8-06482  
*Proc. Amer. Soc. civ. Engrs*, August, 1961 : 1-37  
Foundation stability for a submarine liquid sulphur pipeline

Examines vertical and lateral stability of a 7-mile line, entrenched in sediments between Grand Isle, Louisiana, and offshore mine in Gulf of Mexico. Issued also as: *Contr. Oceanogr. Met. A, and M. Coll. Tex.*, 1960-1961, (180).

- Kornicker, L. (1961)** M  
8-06483  
*A.I.B.S. Bull.*, December 1961, 27-8, 31  
Inland education of oceanographers

Argues that in U.S.A. training of oceanographers can well be expanded at universities in non-coastal states having strong natural sciences faculties. Issued also as: *Contr. Oceanogr. Met. A, and M. Coll. Tex.*, 1960-1961, (183).

- Shuleïkin, V. V. (1962)\*** M  
8-06484  
*Izv. Akad. Nauk SSSR (geofiz.)*, February-April, 2 p.  
Superficial 'oceanology'

- Egor'eva, A. V. & I. A. Utkin (1960)\*** M  
8-06485  
*Razv. Okh. Nedr*, 26 (11) : 6-10  
(Problems in investigations of mineral resources under the bottoms of seas and oceans). Ru

- Egor'eva, A. V. & I. A. Utkin (1962?)** M  
8-06486  
Washington, OTS  
Problems in investigations of mineral resources under the bottom of seas and oceans

En 8-06485. Available from the Office of Technical Services, Department of Commerce, Washington, D.C.

**Anon.** (1962?)M  
8-06487

Washington, OTS

Literature on meteorology, hydrology and oceanography published in 1960

*En: Trud. Inst. Mineral*, (2) : 1-84, 1959. Available from the Office of Technical Services, Washington, D.C.**Rakestraw, N. W.** (1962)M  
8-06488*Trans. Amer. geophys. Un.*, 43 (3) : 299-300

Visiting scientist program in oceanography

Notes on a program of lectures on various aspects of oceanography delivered by visiting scientists.

**Argentina. Laws, Statutes, etc.** (1962)M  
8-06489*Bol. ofic. Argent.*, (19.788) : 1-2

Decreto N° 2.456 por el que se crea el régimen de promoción de la pesca marítima.—16 de marzo de 1962 (Decree No. 2.456 relative to the sea-fishing promotion regime.—16 March 1962)

Extensive provisions covering most aspects of sea fisheries, including fishing vessels, fish processing factories, financial assistance, etc.

**Argentina. Laws, Statutes, etc.** (1962)M  
8-06490*Bol. ofic. Argent.*, (19.788) : 2

Decreto N° 2.457 por el que se autoriza la compra de dos barcos pesqueros.—16 de marzo de 1962 (Decree No. 2.457 authorizing the purchase of two fishing vessels.—16 March 1962)

Of the type 'purse-seiner'.

**New South Wales. Laws, Statutes, etc.** (1962)MF  
8-06491*Govt Gaz. N.S.W.*, (49) : 1461

Proclamation, made under the fisheries and oyster farms act, 1935, as amended relating to the whole of the waters of Shaw's Bay, county of Rous.—9 May 1962

Prohibits fishing with spears, spearguns and similar devices, in the tidal waters specified, from 1 May 1962 to 1 Jun. 1965.

**Belgium. Laws, Statutes, etc.** (1962)M  
8-06492*Monit. belge*, (152) : 5465Arrêté ministériel du 18 juin 1962 interdisant temporairement la pêche dite 'à la traine' pratiquée sur embarcation à moteur (Ministerial order temporarily prohibiting drag-net fishing using vessels equipped with engines.—18 June 1962). *Fr Ne*

To put an end to abuses. Valid until the Saturday preceding the second Sunday in Jun. 1963 exclusive.



**Chile. Laws, Statutes, etc. (1962)**

M  
8-06493

*Diario ofic., Santiago*, (25,271) : 1249-50

Decreto núm. 368 de 20 de marzo de 1962. Modifica el presupuesto para 1961 de la Corporación de Fomento de la Producción (Decree No. 368 amending the budget of the Production Development Corporation for 1961.—20 March 1962)

Includes investment in an industrial fishing project.

**Ecuador. Laws, Statutes, etc. (1962)**

M  
8-06494

*Reg. ofic. Ecuador*, (170) : 1400-1

Decreto N° 749 de 15 de mayo de 1962. Reglaméntase la pesca del atún en aguas equatorianas (Decree No. 749 regulating tunny fishing in Ecuadoran waters.—15 May 1962)

Prohibits purse-seine fishing in the described sea area.

**Cyprus. Laws, Statutes, etc. (1961)**

M  
8-06495

*Episs. Ephēm. kypriaks Dēmokr.*, (102) : 388

Arith. No. 44 : Nomos tropopoion ton peri alieias nomon. (Kef. 135) (Act No. 44 of 1961: fishing (amendment) act, 1961)

Amendment in respect of penalties.

**Germany, Eastern. Laws, Statutes, etc. (1962)**

M  
8-06496

*GesBl. dtsh. dem. Repub.* (2), (41) : 362 p.

Anordnung Nr. 2 über den Fischfang im Bereich der Küstenfischerei (Küstenfischereiordnung).—Vom 9. Mai 1962 (Order No. 2 relative to coastal fishing (coastal fisheries order).—9 May 1962)

Amends order of 18 May 1960 on same subject, with regard to minimum size of fish and to penalties.

**Germany. Federal Republic. Laws, Statutes, etc. (1962)**

M  
8-06497

*MinistBl. Germ. fed. Rep.*, (11) : 135-6

Richtlinien für die Gewährung von Neubaudarlehen an Unternehmen der Grossen Hochsee und Grossen Heringsfischerei.—Vom 28. Mai 1962 (Rules for the granting of loans to large concerns engaged in high seas and herring fishing for the building of new fishing craft.—28 May 1962)

For the modernization and rationalization of fishing.

**Madagascar. Laws, Statutes, etc. (1962)**M  
8-06498*J. off. Répub. malgache*, (224) : 934-7

Décret n° 62-213 du 18 mai 1962, réglementant le contrôle de la salubrité et des conditions de conservation des produits de la mer d'origine animale destinés à la consommation (Decree No. 62-213 regulating the sanitary inspection and the control of the conditions of preservation of sea produce of animal origin for human consumption.—18 May 1962)

Extensive and detailed regulations, dealing with: hygienic control of fish, crustaceans and echinoderms; conditions for the installation and operation of factories or plants processing marine products; and conditions for the preparation and sale of salted, dried or smoked marine products.

**Peru. Laws, Statutes, etc. (1962)**M  
8-06499*Peruano*, (6246) : 1 p.

Resolución ministerial N° DC-289 por la que se reconoce oficialmente a la Asociación de Armadores Pesqueros del Perú.—10 de febrero de 1962 (Ministerial resolution No. DC-289 giving official recognition to the Fishing Vessel Owners' Association of Peru.—10 February 1962)

**Peru. Laws, Statutes, etc. (1962)**M  
8-06500*Peruano*, (6251) : 1 p.

Resolución ministerial N° DC-341 relativa a los requisitos para que las embarcaciones se hagan a la mar.—19 de febrero de 1962 (Ministerial resolution No. DC-341 relative to the conditions that must be fulfilled for fishing vessels to put to sea.—19 February 1962)

Lays down nine requirements respecting equipment and certificates.

**Peru. Laws, Statutes, etc. (1962)**M  
8-06501*Peruano*, (6287) : 2 p.

Resolución ministerial N° DC-480 por la que se autoriza el funcionamiento de la escuela técnica naval José Olaya.—10 de marzo de 1962 (Ministerial resolution No. DC-480 authorizing the operation of the José Olaya technical naval school.—10 March 1962)

Designed for masters and engineers of fishing vessels.

**Peru. Laws, Statutes, etc. (1962)**M  
8-06502*Peruano*, (6284) : 1 p.

Resolución suprema N° 38 estableciendo que los cargamentos de harina de pescado que se exporten por el Callao deberán transportarse directamente al costado de los barcos.—29 de marzo de 1962 (Supreme resolution No. 38 providing that shipment of fish meal for export through Callao should be transported directly alongside the vessels loading.—29 March 1962)

Avoids fire risks.

M  
8-06503

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6295) : 2 p.

Resolución ministerial N° 1201 por la que se revalida una licencia para fábrica de harina de pescado.—23 de marzo de 1962 (Ministerial resolution No. 1201 relative to the revalidation of a licence for a fish meal plant.—23 March 1962)

Refers to a fish meal plant in the Supe area.

M  
8-06504

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6299) : 2 p.

Resolución ministerial N° 1233 por la que se autoriza utilizar una licencia para fábrica de harina de pescado en Chancay.—27 de marzo de 1962 (Ministerial resolution No. 1233 authorizing the use of a fish plant licence issued for Chancay.—27 March 1962)

The licence issued under ministerial resolution No. 4949 of 30 Dec. 1961 was for the Chancay area. The present resolution allows the use of the same licence for the establishment of a fish meal plant in the Huarney area in substitution for the Chancay area.

M  
8-06505

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6292) : 2 p.

Resolución ministerial N° 1347 por la que se prorroga el plazo para trasladar una fábrica de harina de pescado de Paita a Supe.—30 de marzo de 1962 (Ministerial resolution No. 1347 extending the time limit allowed for the transfer of a fish meal plant from Paita to Supe.—30 March 1962)

Until 15 Apr. 1963.

M  
8-06506

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6299) : 2 p.

Resolución ministerial N° 1401 por la que se autoriza una licencia provisional para una fábrica de harina de pescado en Chancay.—4 de abril de 1962 (Ministerial resolution No. 1401 granting a provisional licence for a fish meal plant at Chancay.—4 April 1962)

Capacity of 4 tons an hour.

M  
8-06507

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6304) : 2 p.

Resolución ministerial N° 1400 por la que se autoriza una licencia provisional para una fábrica de harina de pescado en Chancay.—4 de abril de 1962 (Ministerial resolution No. 1400 granting a provisional licence for a fish meal plant at Chancay.—4 April 1962)

Capacity of 4 tons an hour.

**Peru. Laws, Statutes, etc. (1962)**M  
8-06508*Peruano*, (6291) : 1 p.

Decreto supremo relativo al impuesto de timbres en la liquidación que efectúan las embarcaciones de pesca.—9 de abril de 1962 (Supreme decree relative to the stamp tax on liquidation payments made by fishing vessels.—9 April 1962)

When the captains and crews of fishing vessels are paid off, such payment shall be subject to a stamp tax of 4.5 per mil payable by the captains and crew members concerned.

**Peru. Laws, Statutes, etc. (1962)**M  
8-06509*Peruano*, (6307) : 1 p.

Resolución directoral N° 21 por la que se establece el plazo para que las embarcaciones pesqueras se provean de elementos de seguridad.—9 abril de 1962 (Directorial resolution No. 21 laying down the time limit within which fishing vessels must be equipped with life-saving equipment.—9 April 1962)

Limit of 90 days from publication of resolution.

**Peru. Laws, Statutes, etc. (1962)**M  
8-06510*Peruano*, (6311) : 1 p.

Resolución ministerial N° 1908 por la que se autoriza el uso de una licencia provisional para instalar fábrica de harina de pescado en Chancay.—28 de abril de 1962 (Ministerial resolution No. 1908 authorizing the use of a provisional licence for the installation of a fish meal plant in Chancay.—28 April 1962)

Capacity of 4 tons an hour.

**Peru. Laws, Statutes, etc. (1962)**M  
8-06511*Peruano*, (6311) : 1 p.

Resolución ministerial N° 1953 por la que se otorga una licencia provisional para fábrica de harina de pescado en Végueta.—2 de mayo de 1962 (Ministerial resolution No. 1953 granting a provisional licence for a fish meal plant in Végueta.—2 May 1962)

Capacity of 30 tons an hour.

**South West Africa. Laws, Statutes, etc. (1962)**M  
8-06512*Off. Gaz. S.W. Afr.*, (2397) : 491

Goewermentskennisgewing No. 73. Wysiging van regulasies op robbevens en wisserye.—1 Mei 1962 (Government notice No. 73 relating to amendment of regulations on sealing and fisheries.—1 May 1962)

Minor amendment of figures.



# MISCELLANEOUS AND AUXILIARIES

M

8-06513

**Spain. Laws, Statutes, etc. (1962)**  
*Bol. ofic. Estado, Madr.*, (125) : 7068

Orden de 12 de mayo de 1962 por la que se fija el tipo de interés exigible en los préstamos que se otorguen por la Caja Central de Crédito Marítimo y Pesquero (Order fixing the interest payable on loans granted by the Central maritime and fisheries credit fund.—12 may 1962)

At 4 per cent.

M

8-06514

**Spain. Laws, Statutes, etc. (1962)**  
*Bol. ofic. Estado, Madr.*, (146) : 8436

Orden de 13 de junio de 1962 por la que se crea la comisión nacional para evitar la contaminación de las aguas del mar por los hidrocarburos (Order establishing the national commission to avoid the contamination of sea water by oil.—13 June 1962)

To study water pollution problems and examine possible ratification by Spain of the 1954 London convention for the prevention of pollution of the sea by oil.

M

8-06515

**Spain. Laws, Statutes, etc. (1962)**  
*Bol. ofic. Estado, Madr.*, (149) : 8728-9

Decreto 1356/1962 de 14 de junio, por el que se determinan los dispositivos de salvamento e instalaciones radioeléctricas de que han de ir provistas las embarcaciones de pesca (Decree No. 1356 establishing the life-saving and radio equipment with which fishing vessels shall be provided.—14 June 1962)

General technical requirements.

M

8-06516

**Spain. Laws, Statutes, etc. (1962)**  
*Bol. ofic. Estado, Madr.*, (169) : 9857-8

Orden de 18 de junio sobre clasificación de las industrias de harinas de pescado (Order on the classification of fish meal industries.—18 June 1962)

First group to comprise fish processing plants and second group to include guano and fish manure processing plants.

M

8-06517

**Spain. Laws, Statutes, etc. (1962)**  
*Bol. ofic. Estado, Madr.*, (169) : 9861-3

Orden de 30 de junio de 1962 por la que se dictan normas para desarrollo del decreto número 1356/1962, de 14 de junio, que determina los dispositivos de salvamento e instalaciones radioeléctricas de que han de ir provistas las embarcaciones de pesca (Order laying down rules for the application of decree No. 1356 of 14 June 1962, establishing the life-saving and radio equipment with which fishing vessels shall be provided.—30 June 1962)

Detailed technical requirements.

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- M  
8-06518
- Spain. Laws, Statutes, etc. (1962)**  
*Bol. ofic. Estado, Madr.*, (169) : 9863-6  
 Orden de 7 de julio de 1962 por la que se aprueba el reglamento de la pesca con artes de arrastre remolcados por embarcaciones (Order approving the regulations governing fishing with trawling equipment under tow.—7 July 1962)  
 Prescribes mesh size, minimum size of fish, etc.
- M  
8-06519
- Tunisia. Laws, Statutes, etc. (1962)**  
*J. off. Tunis.*, (58) : 840  
 Arrêté du secrétaire d'état à l'agriculture du 26 juin 1962, relatif aux zones de protection des madragues pour la campagne de pêche du thon de l'année 1962 (Order relative to protected zones in respect of tunny nets for the 1962 tunny fishing seasons.—26 June 1962)
- M  
8-06520
- Seychelles. Laws, Statutes, etc. (1962)**  
*Seychelles Govt Gaz.*, (36) : 38-9  
 S.I. No. 27 of 1962. The fisheries regulations, 1962, made under the fisheries ordinance (chapter 16).—18 June 1962  
 Establishes fishing reserves. Prohibits fishing therein with any nets, and dragging any net across the seabed, except for encircling purposes.
- M  
8-06521
- Anon. (1962)**  
*Norsk Hvalfangst-tid.* 51 (12) : 461-6  
 International quota agreements  
 Text of final whale quota agreement signed in London on 5 Jun. 1962.
- M  
8-06522
- Puerto Rico University. Institute of Caribbean Studies (1962)**  
*Caribb. J. Sci.*, 2 (3) : 105-38  
 Contains list of recent scientific publications for Caribbean area—incl. section on fish and fisheries—and articles incl. observations of summer 1961 in Puerto Rico.
- M  
8-06523
- International Conference on Safety of Life at Sea (1960)**  
 London, H.M.S.O. : 512 p.  
 Final act of conference with annexes including the international convention for the safety of life at sea, signed in London, 17 June 1960
- G  
8-06524
- Needham, A. E. (1961)**  
*Nature, Lond.*, 192 (4802) : 579-80  
 Rate of senescence  
 Ci 1908 Minnot, C. S.; 571827.

- Hill, J. E.** (1961) MF  
*Zool. Rec.*, 97 (19) : 112 p. 8-06525

67 pages of references in alphabetic order of authors' names to documents published mostly in 1960; subject, geographic and taxonomic indexes.

- Markowski, S.** (Ed.) (1960) MF  
*Zool. Rec.*, 96 (1) : 26 p. 8-06526

23 pages of references in alphabetic order of authors' names to documents published mostly in 1959; subject, geographic and taxonomic indexes.

- Elton, C. S.** (1962) MF  
*Nature, Lond.*, 196 (4849) : 3-4 8-06527  
 Natural resources as population problems

Re 62-04430.

- Facinelli, B.** (1962)\* MF  
*Vie d. Mondo*, 24 : 560-74 8-06528  
 Il peso economico della pesca nel mondo (The economic importance of world fisheries). *It*

- Lucas, K. C.** (1962) MF  
 Paper presented to the Symposium on Cavitation and Hydraulic Machinery, 8-06529  
 Sendai, Japan, September 5, 1962

The mortality to fish passing through hydraulic turbines as related to cavitation and performance characteristics, pressure change, negative pressure and other factors

- Harding, J. P. & R. W. Ingle** (Comp.) (1959) MF  
*Zool. Rec.*, 94 (10) : 99 p. 8-06530  
 Crustacea

44 pages of references, in alphabetic order of authors' names, to documents published mainly in 1957. Subject, geographic and taxonomic indexes.

- New South Wales. Laws, Statutes, etc.** (1962) MF  
*Govt Gaz., N.S.W.*, (40) : 1136 8-06531

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of the waters of Coff's Harbour Creek, county of Fitzroy.—28 March 1962

Prohibits the taking of fish by nets of every description, in the specified tidal waters, from 11 Jul. 1962 to 10 Jul. 1967.

- New South Wales. Laws, Statutes, etc.** (1962) MF  
*Govt Gaz. N.S.W.*, (42) : 1217 8-06532

Proclamation, made under the fisheries and oyster farms act, 1935, as amended, relating to portion of waters of Tweed River, county of Rous.—10 April 1962

Prohibits the taking of fish by nets of every description, in the specified tidal and inland waters, for a period of five years.

- New South Wales. Laws, Statutes, etc.** (1962) MF  
*Govt Gaz. N.S.W.*, (42) : 1217 8-06533

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to the waters of Wallis Lake, county of Gloucester.—10 April 1962

Prohibits the taking of fish by nets of every description other than prawn nets prescribed by regulations 21, 25 and 139, in inland and tidal waters during the periods specified, for the years 1962–1966.

- New South Wales. Laws, Statutes, etc.** (1962) MF  
*Govt Gaz. N.S.W.*, (42) : 1218 8-06534

Proclamation, made under the fisheries and oyster farms act, 1935–1960.—18 April 1962

Prohibits the taking of fish by nets of every description, in tidal waters during the period specified, for the years 1962–1967.

- New South Wales. Laws, Statutes, etc.** (1962) MF  
*Govt Gaz. N.S.W.*, (42) : 1218 8-06535

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to the waters of Nerimbula Lake, county of Auckland.—18 April 1962

Prohibits the taking of fish by nets of every description, in the specified tidal waters, from 28 Mar. 1962 to 27 Mar. 1967.

- New South Wales. Laws, Statutes, etc.** (1962) MF  
*Govt Gaz. N.S.W.*, (49) : 1461 8-06536

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to portion of waters of Richmond River, county of Rous.—2 May 1962

Prohibits fishing with baited fish traps in the tidal waters during the periods specified.

- New South Wales. Laws, Statutes, etc.** (1962) MF  
*Govt Gaz. N.S.W.*, (49) : 1473 8-06537

Closure notification, made under the fisheries and oyster farms act, 1935, as amended, relating to portion of the waters of Hawkesbury River, counties of Cumberland, Cook, Hunter and Westmoreland.—9 May 1962

Prohibits fishing with prawn hauling nets as prescribed by regulation 21, in the tidal and inland waters specified, from 1 Jun. 1962 to 31 May 1963.



# MISCELLANEOUS AND AUXILIARIES

MF  
8-06538

**New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (49) : 1473-4

Closure notification, made under the fisheries and oyster farms act, 1935, as amended, relating to New South Wales tidal and inland waters.—9 May 1962

Prohibits the taking of fish by means of trawl nets of every description, in the tidal waters and during the periods specified.

MF  
8-06539

**New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (49) : 1474

Closure notification, made under the fisheries and oyster farms act, 1935, as amended, relating to a portion of the waters of Clarence River, counties of Clarence, Drake, Fitzroy and Buller.—9 May 1962

Prohibits the use of prawn hauling nets prescribed in regulation 21, in the tidal and inland waters and during the periods specified.

MF  
8-06540

**New South Wales, Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (49) : 1474

Closure notification, made under the fisheries and oyster farms act, 1935, as amended, relating to a portion of the waters of Hunter River, counties of Northumberland, Hunter, Gloucester, Durham and Brisbane.—9 May 1962

Prohibits the use of prawn hauling nets prescribed in regulation 21, in the tidal and inland waters, and during the periods specified.

MF  
8-06541

**Western Australia. Laws, Statutes, etc. (1961)**  
 Act No. 20 of 1961, 10<sup>2</sup> Elizabeth II., No. 20, 30 October 1961 : 8 p.

Fisheries act amendment act, 1961: an act to amend the fisheries act, 1905-1960.—30 October 1961

Various amendments in respect of returns to be furnished, as to the catch, sales, output, purchases, receipts, fishing gear used, time occupied; substitution of a new second schedule dealing with (a) marine or fluvio-marine species, (b) freshwater species, (c) crustaceans and (d) method of measurements.

MF  
8-06542

**Ceylon. Laws, Statutes, etc. (1962)**  
*Ceylon Govt Gaz.*, (13,057) Pt 1, Sect. 1 : 1071 p.

Order No. 190, made under the food control act, No. 25 of 1950.—30 April 1962

A scheme of rationing of dried fish (all varieties) by means of ration books and token cards shall be in force as from 1 May 1962.

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- Ceylon. Laws, Statutes, etc. (1962)** MF  
*Ceylon Govt Gaz.*, (13,089) Pt 1, Sect. 1 : 1161 p. 8-06543  
 Government modification, made under the food control act, No. 25 of 1950, relating to ration of dried fish.—30 April 1962

Established the monthly ration of dried fish for: infants, children, ordinary persons, and workers.

- Colombia. Laws, Statutes, etc. (1962)** MF  
*Diario ofic., Bogota*, (30760) : 5 8-06544  
 Resolución ejecutiva No. 78 de 22 de marzo de 1962, por la que se fija la cuantía de unas exenciones del impuesto sobre la renta, y se califican como básicas unas industrias (Executive resolution No. 78 fixing the amount of certain income tax exemptions and classifying some industries as basic.—22 March 1962)

Tax exemptions for river and sea fishing for human and animal consumption and industrial purposes. These are classed as basic industries.

- Finland. Laws, Statutes, etc. (1961)** MF  
*Finl. FörfattnSaml.*, (332) : 603-21 8-06545  
 Statsrådets beslut N:o 332 angående ändring av statsrådets beslut om licensfri import.—22 juni 1961 (Order No. 332, amending the order on duty-free imports.—22 June 1961)

Also in respect of fish and fish products.

- Finland. Laws, Statutes, etc. (1961)** MF  
*Finl. FörfattnSaml.*, (382-387) : 766 p. 8-06546  
 Lantbruksministeriets beslut N:o 387 om inskränkning av fisket i vissa vatten.—3 juli 1961 (Order No. 387, restricting fishing in certain waters.—3 July 1961)

Lists waters in which fishing is totally or partially prohibited.

- Germany, Eastern. Laws, Statutes, etc. (1962)** MF  
*GesBl. dtsch. dem. Repub.* (2), (41) : 360-1 8-06547  
 Dritte Durchführungbestimmung zum Fischereigesetz.—Ausgabe von Angelberechtigungsscheinen.—Vom 3. Mai 1962 (Third order giving effect to the fisheries act.—Issue of fishing permits.—3 May 1962)

Regulations of an administrative nature promulgated under paragraph 19 of the fisheries act of 2 December 1959.

**Germany. Federal Republic. Laws, Statutes, etc. (1962)** MF 8-06548  
*BundGesBlatt dtsh. fed. Rep., I, (94) : 161 p.*

Verordnung zur Aufhebung der Verordnung über Verbilligung von Dieselmotorkraftstoff für die Grosse Hochsee-, Gross Herings-, Kleine Hochsee-, Küsten- und Binnenfischerei.—Vom 27. Februar 1962 (Order repealing the order relative to the reduction in the price of diesel oil for large-scale fishing on the high-seas, for herring fishing purposes, for small-scale fishing on the high seas, for coastal and inland fishing purposes.—27 February 1962)

Order of 6 Jun. 1951 (BGBI, I, p. 376), as last amended on 28 Mar. 1960 (BGBI, I, p. 208) rescinded as from 30 June 1962.

**Germany. Federal Republic. Laws, Statutes, etc. (1962)** MF 8-06549  
*MinistBl. Germ. fed. Rep., (13) : 165-8*

Richtlinien 1962 für die Zinsverbilligung von Darlehen zur Förderung vordringlicher agrar- und ernährungswirtschaftlicher Massnahmen.—Vom 15. Juni 1962 (1962 directive for the reduction of the rate of interest on loans for the promotion of urgent agricultural and nutritional economy measures.—15 June 1962)

Includes loans for the fishing industry.

**Peru. Laws, Statutes, etc. (1961)** MF 8-06550  
*Peruano, (6208) : 2-3*

Decreto supremo N° 31 estableciendo la lista de concesiones otorgadas por el Perú a las mercaderías originarias de los países integrantes de la Asociación Latino-Americana de Libre Comercio.—29 de diciembre de 1961 (Supreme decree No. 31 setting forth the list of concessions granted by Peru with respect to goods imported from the countries belonging to the Latin American Free Trade Association.—29 December 1961)

Extensive list including fisheries products.

**Peru. Laws, Statutes, etc. (1962)** MF 8-06551  
*Peruano, (6721) : 1 p.*

Decreto supremo por el que se precisan los alcances del decreto supremo N° 7 de 19 de enero último, sobre actividades pesqueras.—9 de marzo de 1962 (Supreme decree specifying the scope of the supreme decree No. 7 of 19 January 1962 relative to fisheries activities.—9 March 1962)

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Reviews literature and gives technical description.

**U.N. Conference on the Application of science and technology for the benefit of the less developed areas (1962)** MF 8-07046

U.N., E/CONF. 39/GR. 69 (C), mimeo, 14 p.

Agenda item: C.8—C.8.1—C.8.2—Fishery resources and production marine and inland fisheries. Report of the Conference secretary-general

Do 61-453me. Essay review of papers contributed to the meeting, with supplementary material as introduction to this item of the agenda. Papers considered are: 8-07008-10, 8-07050-1, 8-07189-203, 8-07211-5, 8-07218-9, 8-07282-3, 8-07343-4, and 8-07360.

**Dawes, B. (Ed.) (1963)\*** MF 8-07047  
 London, Academic Press, 360 p.  
 Advances in parasitology

Contains 8-07284.

**Chang, T.-S. (1959)\*** F 8-07048  
*Curr. Sci.*, (28) : 188-9

Hydrobiology serves fresh-water fishery in New China

BSEA 5 (7) 3687.

**Kostomarov, B. (Thierbach, T., Transl.) (1961)** F 8-07049  
 Berlin, Deutscher Landwirtschaftsverlag, 375 p.  
 Die Fischzucht (Fish breeding)

De 1955, Kostomarov, B.

# GENERAL

F  
8-07050

**de Menezes, R. S.** (1962)  
U.N., E/CONF. 39/C/306

Activities of the Pisciculture Division (PD) of the National Department of Drought-Relief Works (DNOCS) in one of the most backward regions of the world, the Brazilian northeast

Do 61-453me.

F  
8-07051

**Hickling, C. F.** (1962)  
U.N., E/CONF. 39/C/32  
Inland fisheries

Do 61-453me.

F  
8-07052

**Pennak, R. W.** (1962)  
New York, The Ronald Press Company, 769 p.  
Fresh-water invertebrates of the United States

Covers the free-living fauna including aquatic insects, with emphasis on natural history, ecology and taxonomy.

F  
8-07053

**WMO. Executive Committee. Fourteenth Session, Geneva**  
(1962)  
Geneva, EC-XIV/Doc. 45, mimeo, 4 p.

Report by the president of the Commission for Hydrological Meteorology—submitted by the president of CHM

Do 61-367me.

F  
8-07054

**WMO. Executive Committee. Fourteenth Session. Geneva**  
(1962)  
Geneva, ED-XIV/Doc. 70, add. 1, mimeo, 2 p.

Relations with the United Nations and other international organizations. Draft working arrangements with the Danube Commission—submitted by the secretary-general

Do 61-367me.

F  
8-07055

**WMO. Executive Committee. Fourteenth Session, Geneva**  
(1962)  
Geneva, EC-XIV/Doc. 70, mimeo, 3 p.

Relations with the United Nations and other international organizations. Proposed working arrangements with the Danube Commission—submitted by the secretary-general

Do 61-367me.

**Reichenbach-Klinke, H.-H.** (1961)\*

Stuttgart, Gustav Fischer Verlag, 100 p.

Krankheiten der Amphibien (Diseases of amphibians)

F  
8-07056

**Czechoslovakia. Československá Akademie Zemědělských Věd**  
(1962)

Prague, Czechoslovak Academy of Sciences: 274 p.

Advances in biological sciences. Slovy

G  
8-07057

Papers giving a 10-year review of work of Czechoslovak scientists on 10th anniversary of incorporation of biological institutes in the new academy. Contains 8-07181.

**WMO. Executive Committee. Fourteenth Session, Geneva**  
(1962)

Geneva, XIV/Doc. 32, mimeo, 36 p.

Amendments to the technical regulations—submitted by the secretary-general

G  
8-07058

Do 61-367me. Appends proposed amendments to the technical regulations under chapters: Proposed amendments to the technical regulations: Semi-automatic meteorological observing station; Meteorological codes; Meteorological telecommunications; Synoptic and forecasting practices; Climatological practices; Meteorological service for shipping; Values of some physical functions and constants used in meteorology; International barometer convention; and values of some physical functions and constants used in meteorology.

**WMO. Executive Committee. Fourteenth Session, Geneva**  
(1962)

Geneva, XIV/Doc. 54, mimeo, 11 p.

Final report of the Executive Committee working group on world-wide network of meteorological stations—submitted by the chairman of the working group

G  
8-07059

Do 61-367me.

**WMO. Executive Committee. Fourteenth Session, Geneva**  
(1962)

Geneva, EC-XIV/Doc. 53, mimeo, 5 p.

Report by the president of the Commission for Instruments and Methods of Observations

G  
8-07060

Do 61-367me.



PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

- Anon.** (Program for Scientific Translations, Jerusalem, Transl.) 8-07061  
(1961)  
PST Cat. No. 1

Geographic and oceanographic observations in the Antarctic. Six articles arranged in symposium form: 1. New data on the bottom relief and the sediments of east Antarctic seas. 2. Geographical observations in an Antarctic 'oasis'. 3. Geographical observations in the Antarctic. 4. Cold wasteland in the Antarctic continent. 5. Bottom relief and sediments of the southern part of the Indian Ocean (two articles)

These articles comprise a report of some of the latest Russian advances on the relief of ocean bottoms in the Antarctic, and certain geographical observations conducted by Russian Antarctic expeditions between 1955 and 1958. Available from Program for Scientific Translations, Jerusalem.

- Herlinveaux, R. H. & J. P. Tully** (1961) 8-07062  
*J. Fish. Res. Bd Can.*, 18 (6) : 1027-71  
Some oceanographic features of Juan de Fuca Strait

The distribution and structure of dissolved oxygen, temperature and density and their seasonal and tidal variations are summarized, and related to the tidal and estuarine mechanisms.

- Tabata, S.** (1961) 8-07063  
*J. Fish. Res. Bd Can.*, 18 (6) : 1073-124

Temporal changes of salinity, temperature, and dissolved oxygen content of the water at station 'P' in the northeast Pacific Ocean, and some of their factors

Oceanographic data collected at ocean weather station 'P' (Lat. 50° N, Long. 145° W) during the two years between Aug. 1956 and Jul. 1958 are presented and probable factors influencing the water properties are discussed and explanations are given to account for these variations.

- Sasaki, T. et al.** (1962) 8-07064  
*Sci. Pap. Inst. phys. chem. Res., Tokyo*, 56 (1) : 69-76  
Telemetering of oceanographic observation on current meter

As first step of telemetering by radio, instrument for measuring velocity and direction of current has been devised with which successful results are obtained.

- Schemainda, R.** (1960) 8-07065  
*Fischereiforsch.*, 3 (4) : 19-21  
Zur rezenten Aussüßung der Ostsee (On the recent sweetening of the Baltic Sea)

Reviews literature as to hydrographic peculiarities and their relationship to fish populations and production.

## BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

**Ranke, W.** (1961)M  
8-07066*Fischereiforsch.*, 4 (5) : 13-6

Hydrographische Untersuchungen im Seegebiet westliche Barentssee—Bäreninsel—Spitzbergen 1960/1961 (Hydrographical investigations in the area of the western Barents Sea—Bear Island—Spitsbergen during 1960/61)

Describes thermal conditions.

**Schemainda, R.** (1961)M  
8-07067*Fischereiforsch.*, 4 (4) : 16-9

Hydrographische Bedingungen auf den Fangplätzen der Nordsee von Mai bis Oktober 1960 (Hydrographical conditions in the catch area of the North Sea from May to October 1960)

Gives a synoptical account and states that locally working tide currents are to be made responsible for the establishment of hydrographic elements and their horizontal and vertical structure.

**Peloquin, R. A.** (1961)\*M  
8-07068*Informal oceanogr. Manusc. U. S. hydrogr. Off.*, (18) : 45 p.

Implementation of an airborne oceanographic platform

**Paccagnini, R. & A. Casellas** (1961)\*M  
8-07069*Contr. Inst. antárt. argent.*, (64) : 12 p.

Estudios y resultados preliminares sobre trabajos oceanográficos en el area del mar de Weddel (Studies and preliminary results on oceanographic research in the area of the Weddell Sea)

**Blackburn, M.** (1962)M  
8-07070*Spec. Sci. Rep. U.S. Fish Wildl. Serv., Fish.*, (404) : 28 p.

An oceanographic study of the Gulf of Tehuantepec

Topography and climatology of region; Previous oceanographic information: mean surface temperature; mean surface current, mean depth of mixed layer, mean standing crop of zooplankton, data from expedition EASTROPIC; Observations on cruise TO-58-1, expedition SCOT (May and Jun. 1958); Observations on cruise TO-58-2 (Nov. 1958); Observations on cruise TO-59-1 (Jan. and Feb. 1959); Observations on cruise TO-59-2 (Sep. 1959).

**Terada, K. & H. Fuchi** (1960)M  
8-07071*Gakujutsu geppo*, August, 1960 : 283-290

(Summary result of deep-sea observation by 'Ryo Fu-Marū'). Ni

**Lavoie, R. L. & C. J. Wiederanders** (1960)\*M  
8-07072*Sci. Rep. Hawaii Inst. Geophys.*, (1)

Objective wind forecasting over the tropical Pacific

# PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

- M  
8-07073
- Wilson, B. W.** (1960)  
*Civil Eng. S. Africa*, July 1960 : 143-4  
Bespreking. Discussion. The troubled waters of Table Bay Harbour
- Re 8-06058. Issued also as: *Contr. Oceanogr. Met. A, and M. Coll. Tex.*, 1960-1961, (154).
- MF  
8-07074
- Pickard, G. L.** (1961)  
*J. Fish. Res. Bd Can.*, 18 (6) : 907-99  
Oceanographic features of inlets in the British Columbia mainland coast
- Detailed study of the physical and chemical oceanography which notes that though the inlets of the mainland coast are morphologically fjords, few possess sill depths less than 15 metres, and very few, if any, are sufficiently stagnant to exhibit anaerobic conditions.
- MF  
8-07075
- Chesapeake Bay Institute. The Johns Hopkins University**  
(1962)  
*Data Rep. Chesapeake Bay Inst.*, 33 : 13 p.  
Bay cruise 14. 23 July-26 July 1957
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 23-26 Jul. 1957.
- MF  
8-07076
- Chesapeake Bay Institute. The Johns Hopkins University**  
(1962)  
*Data Rep. Chesapeake Bay Inst.*, 34 : 41 p.  
Bay cruise 15. 11 September-20 September 1957
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 11-20 Sep. 1957.
- MF  
8-07077
- Chesapeake Bay Institute. The Johns Hopkins University**  
(1962)  
*Data Rep. Chesapeake Bay Inst.*, 35 : 25 p.  
Bay cruise 16. 23 January-7 February, 1958
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 23 Jan.-7 Feb. 1958.
- MF  
8-07078
- Chesapeake Bay Institute. The Johns Hopkins University**  
(1962)  
*Data Rep. Chesapeake Bay Inst.*, 36 : 53 p.  
Bay cruise 17. 22 April-13 May 1958
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 22 Apr. to 13 May 1958.

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- MF  
8-07079
- Chesapeake Bay Institute. The Johns Hopkins University**  
(1962)  
*Data Rep. Chesapeake Bay Inst.*, 38 : 39 p.  
Bay cruise 18. 6 August–22 August 1958
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 6 to 22 Aug. 1958.
- MF  
8-07080
- Chesapeake Bay Institute. The Johns Hopkins University**  
(1962)  
*Data Rep. Chesapeake Bay Inst.*, 39 : 13 p.  
Bay cruise 19. 4 November–11 December 1958
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 4 Nov. to 11 Dec. 1958.
- MF  
8-07081
- Chesapeake Bay Institute. The Johns Hopkins University**  
(1962)  
*Data Rep. Chesapeake Bay Inst.*, 40 : 49 p.  
Bay cruise 20. 23 March–19 April 1959
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 23 Mar. to 19 Apr. 1959.
- MF  
8-07082
- Chesapeake Bay Institute. The Johns Hopkins University**  
(1962)  
*Data Rep. Chesapeake Bay Inst.*, 41 : 54 p.  
Bay cruise 21. 6 July–17 July 1959
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 6 to 17 Jul. 1959.
- MF  
8-07083
- Chesapeake Bay Institute. The Johns Hopkins University**  
(1962)  
*Data Rep. Chesapeake Bay Inst.*, 42 : 38 p.  
Bay cruise 22. 3 November–11 December 1959
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 3 Nov. to 11 Dec. 1959.
- MF  
8-07084
- Chesapeake Bay Institute. The Johns Hopkins University**  
(1962)  
*Data Rep. Chesapeake Bay Inst.*, 43 : 39 p.  
Bay cruise 23. 27 April–17 May 1960
- Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 27 Apr. to 17 May 1960.



- Chesapeake Bay Institute. The Johns Hopkins University** MF  
(1962) 8-07085  
*Data Rep. Chesapeake Bay Inst.*, 44 : 46 p.  
Bay cruise 24. 22 August–9 September 1960

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 22 Aug. to 9 Sep. 1960.

- Chesapeake Bay Institute. The Johns Hopkins University** MF  
(1962) 8-07086  
*Data Rep. Chesapeake Bay Inst.*, 45 : 33 p.  
Bay cruise 25. 22 November–5 December 1960

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 22 Nov. to 5 Dec. 1960.

- Chesapeake Bay Institute. The Johns Hopkins University** MF  
(1962) 8-07087  
*Data Rep. Chesapeake Bay Inst.*, 46 : 22 p.  
Bay cruise 26. 27 February–7 April 1961

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 27 Feb. to 7 Apr. 1961.

- Chesapeake Bay Institute. The Johns Hopkins University** MF  
(1962) 8-07088  
*Data Rep. Chesapeake Bay Inst.*, 47 : 32 p.  
Bay cruise 27. 19 July–1 August 1961

Observations on temperature, salinity, dissolved oxygen, pH and weather in Chesapeake Bay and selected tributary estuaries from 19 Jul. to 1 Aug. 1961.

- Wagner, G. (1961)** F  
*Z. Fisch.*, 10 (1/3) : 5–19 8-07089

Temperaturen und Sauerstoff im Grossen Stechlinsee und Sacrower See. Eine Gegenüberstellung der Jahre 1958 und 1959 (Temperatures and O<sub>2</sub>-contents in the Grosse Stechlin Lake and the Lake of Sacrow. A comparison of the years 1958 and 1959). En Ru

Hydrographical record.

- ECE (UN) (1962)** F  
E/ECE/496. Water Poll./Sem. 4, mimeo 8-07090  
Travelling seminar on water pollution on the Rhine. Report by the executive secretary

Do 61-371me.

F

**Hrbáček, J.** (1962)

8-07091

*Rozor. čsl. Akad. Věd (mat. přír.)*, 72 (10) : 114 p.

Species composition and the amount of the zooplankton in relation to the fish stock

Literature review, and account of extensive experiments in two Czechoslovakian ponds and two backwaters of the Elbe, of different productivities, and involving poisoning of fish in one of the backwaters, and comparative studies of physico-chemical characteristics, and qualitative and quantitative analyses of phyto- and zooplankton and benthos. Rather little information is given about the fish stocks themselves, mainly carp, pike, tench, bream, perch or roach. Data tabulated in detail.

F

**Patalas, K.** (1960)

8-07092

*Roczn. Nauk rol. (B)*, 77 (1) : 105-222

Stosunki termiczne i tlenowe oraz przezroczystość wody w 44 jeziorach okolic Węgorzewa (Thermal and oxygen conditions and transparency of water in 44 lakes of Węgorzewo district). *Pl Ru En*

Mainly concerned with primary production.

F

**Patalas, K.** (1960)

8-07093

*Roczn. Nauk rol. (B)*, 77 (1) : 223-42

Mieszanie wody jako czynnik określający intensywność krążenia materii w różnych morfologicznie jeziorach okolic Węgorzewa (Mixing of water as the factor defining intensity of food materials circulation in morphologically different lakes of Węgorzewo district). *Pl Ru En*

Principally concerned with fertilizing mechanisms.

F

**Patalas, K.** (1960)

8-07094

*Roczn. Nauk rol. (B)*, 77 (1) : 243-97

Charakterystyka składu chemicznego wody 48 jezior okolic Węgorzewa (Characteristics of chemical composition of water in forty-eight lakes of Węgorzewo district). *Pl Ru En*

Part of a complex study on fishery management. Aims to determine the chemical contents of water in 48 lakes.

FG

**U.S. Department of Health, Education & Welfare** (1962)

8-07095

*Radiol. Hlth Data*, 3 (10) : 379-424

Contains section on 'water' tabulating data for the month Apr. 1962 for radioactivity in raw surface waters; also global integrals of fallout, etc.

## PLANKTON

M

**Wittenberg, J. B.** (1960)

8-07096

*J. exp. Biol.*, 37 : 698-705

The source of carbon monoxide in the float of the Portuguese man-of-war, *Physalia physalis* L.

- Oncescu, M. & O. Serbanescu** (1963) M  
8-07097  
*Stud. Cercet. Fiziol.*, 14 : 133-41  
The  $\beta$  radioactivity of the zooplankton of the Black Sea

NSA 17 (19) 31843. Measurements of  $\beta$  activity, made immediately after the samples are collected, show a relatively intense radioactivity.

- Parsons, T. R., K. Stephens & J. D. H. Strickland** (1961) M  
8-07098  
*J. Fish. Res. Bd Can.*, 18 (6) : 1001-16  
On the chemical composition of eleven species of marine phytoplankters

Chemical analyses of 11 species of marine planktonic representatives of the Chlorophyceae, Chrysophyceae, Bacillariophyceae, Dinophyceae and Myxophyceae.

- Parsons, T. R.** (1961) M  
8-07099  
*J. Fish. Res. Bd Can.*, 18 (6) : 1017-25  
On the pigment composition of eleven species of marine phytoplankters

Representatives of the Chlorophyceae, Chrysophyceae, Bacillariophyceae, Dinophyceae and Myxophyceae were grown under similar chemical and physical conditions and their pigment content was determined during the exponential phase of growth. Particular attention was paid to the presence of chlorophyll as well as to the identity of certain carotenoids.

- Aron, W.** (1962) M  
8-07100  
*J. Fish. Res. Bd Can.*, 19 (2) : 271-314

The distribution of animals in the eastern North Pacific and its relationship to physical and chemical conditions

Sampling with the Isaacs-Kidd midwater trawl yields good quantities of large and easily-identified animals that can be used as 'indicator organisms' to identify water masses in the north-eastern Pacific Ocean.

- Mansueti, R. J.** (1962) M  
8-07101  
*Quart. Rev. Biol.*, 37 (1) : 52-3

Two new Pacific chaetognaths. Their distribution and relation to allied species

Re 8-03154.

- Dingle, H.** (1962) M  
8-07102  
*Amer. Nat.*, 96 (888) : 151-60

The occurrence and ecological significance of color responses in some marine Crustacea

Observations on specific 'dances' in response to red and blue light in planktonic copepods, decapods, stomatopods and others.

- M  
8-07103
- Lindner, A.** (1960)  
*Fischereiforsch.*, 3 (5/6) : 31-7  
Beitrag über das Oberflächenplankton der färöisch-isländischen Gewässer (Rosengarten) (Contribution to the knowledge of surface plankton in the waters of Iceland and the Faroe Islands)  
Describes spp. and relates occurrence to hydrographic particularities.
- MF  
8-07104
- Karzinkin, G. S.** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 577-82  
K. M. Ber i problema biologicheskoi produktivnosti vodoemov (K. M. Bär and the problem of the biological productivity)
- F  
8-07105
- Polikarpov, G. G. & V. N. Ivanov** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 583-9  
O deistvii  $Sr^{90}$ - $Y^{90}$  na razvivaiushchiusia ikru khamsy (On the influence of  $Sr^{90}$ - $Y^{90}$  to developing of Azov anchovy egg)
- F  
8-07106
- Sleigh, M. A.** (1960)  
*J. exp. Biol.*, 37 : 1-10  
The form of beat in cilia of *Stentor* and *Opalina*
- F  
8-07107
- Kitching, J. A.** (1960)  
*J. exp. Biol.*, 37 : 407-16  
Responses of the heliozoon *Actinophrys sol* to prey, to mechanical stimulation, and to solutions of proteins and certain other substances
- F  
8-07108
- Scherer, E.** (1961)  
*Fischwirt.*, 11 (9) : 271-84  
Die quantitative Entwicklung des Edersee-Zooplanktons in Sommer 1958 (The quantitative development of Eder-See zooplankton during summer 1958)  
Describes sampling method and reports on annual penetrations of populations.
- F  
8-07109
- Patalas, K.** (1960)  
*Roczn. Nauk rol. (B)*, 77 (1) : 299-326  
Punktowa ocena pierwotnej produktywności jezior okolic Węgorzewa (The method of classification of primary productivity of a lake by point system, applied to the lakes of Węgorzewo district). Pl Ru En  
One of a series of publications describing limnological conditions of these lakes. Aims to determine a method of comparing the primary productivity of lakes.



# BENTHOS

# BENTHOS

- |   |         |
|---|---------|
|   | M       |
| <b>Wilson, D. M.</b> (1960)   | 8-07110 |
| <i>J. exp. Biol.</i> , 37 : 46-56   |         |
| Nervous control of movement in annelids   |         |
| Demonstrates slow and fast neuro-muscle systems and their distribution in <i>Neanthes virens</i> Sars.                  |         |
|   | M       |
| <b>Wilson, D. M.</b> (1960)   | 8-07111 |
| <i>J. exp. Biol.</i> , 37 : 57-72   |         |
| Nervous control of movement in cephalopods  |         |
| Account of observations on <i>Octopus bimaculatus</i> and <i>O. bimaculoides</i> .                                      |         |
|   | M       |
| <b>Kitching, J. A. &amp; J. E. Padfield</b> (1960)  | 8-07112 |
| <i>J. exp. Biol.</i> , 37 : 73-82   |         |
| The physiology of contractile vacuoles. 11. Effects of heavy water on the water balance of a suctorian                  |         |
|   | M       |
| <b>Millot, N. &amp; M. Yoshida</b> (1960)   | 8-07113 |
| <i>J. exp. Biol.</i> , 37 : 363-75  |         |
| The shadow reaction of <i>Diadema antillarum</i> Philippi. 1. The spine response and its relation to the stimulus       |         |
| Studies effects of variable intensity and duration of both lighting and shade upon the character of the spine response. |         |
|   | M       |
| <b>Yoneda, M.</b> (1960)  | 8-07114 |
| <i>J. exp. Biol.</i> , 37 : 461-8   |         |
| Force exerted by a single cilium of <i>Mytilus edulis</i> I   |         |
| Deals with force which a single molluscan cilium can produce during its effective stroke. Describes methods used.       |         |
|   | M       |
| <b>Hoyle, G.</b> (1960)   | 8-07115 |
| <i>J. exp. Biol.</i> , 37 : 671-88  |         |
| Neuromuscular activity in the swimming sea anemone, <i>Stomphia coccinea</i> (Müller)                                   |         |
|   | M       |
| <b>Ross, D. M.</b> (1960)   | 8-07116 |
| <i>J. exp. Biol.</i> , 37 : 732-52  |         |
| The effects of ions and drugs on neuromuscular preparation of sea anemones.   |         |
| 1. On preparations of the column of <i>Calliactis</i> and <i>Metridium</i>  |         |
|   | M       |
| <b>Ross, D. M.</b> (1960)   | 8-07117 |
| <i>J. exp. Biol.</i> , 37 : 753-74  |         |
| The effects of ions and drugs on neuromuscular preparation of sea anemones.   |         |
| 2. On sphincter preparations of <i>Calliactis</i> and <i>Metridium</i>  |         |
| Co 8-07116.   |         |

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M  
8-07118

**Ewer, D. W.** (1960)  
*J. exp. Biol.*, 37 : 812-31  
 Inhibition and rhythmic activity of the circular muscles of *Calliactis parasitica* (Couch)

M  
8-07119

**Hubbard, S. J.** (1960)  
*J. exp. Biol.*, 37 : 845-53  
 Hearing and the octopus statocyst

Describes apparatus suitable for transmitting hydrodynamic sound waves and tests the function of statocyst in hearing.

M  
8-07120

**Millot, N. & M. Yoshida** (1960)  
*J. exp. Biol.*, 37 : 376-89  
 The shadow reaction of *Diadema antillarum* Philippi. 2. Inhibition by light

Ci 8-07113.

M  
8-07121

**Altevogt, R.** (1959)\*  
*J. Bombay nat. Hist. Soc.*, (56) : 1-7  
 Love and life of fiddler crabs

BSEA 5 (7) 3652.

M  
8-07122

**Josephson, R. K.** (1961)  
*J. exp. Biol.*, 38 : 17-28  
 The response of a hydroid to weak water-borne disturbances

Describes some of the characteristics of stimuli effective in evoking response in colonies of *Syncorine* and attempts to explain the mechanisms of detection of stimuli and determination of the direction of bending.

M  
8-07123

**Young, J. Z.** (1961)  
*J. exp. Biol.*, 38 : 43-60  
 Rates of establishment of representation in the memory of octopuses with and without certical lobes

M  
8-07124

**Wells, M. J.** (1961)  
*J. exp. Biol.*, 38 : 127-34  
 Weight discrimination by *Octopus*

Experiments reported show that *Octopus vulgaris* cannot be taught to discriminate between objects differing only in weight, although they very readily learn to make textural discriminations under the same conditions.

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| <b>Shaw, J.</b> (1961)   | M       |
| <i>J. exp. Biol.</i> , 38 : 135-52   | 8-07125 |
| Studies on ionic regulation in <i>Carcinus maenas</i> (L.). 1. Sodium balance  |         |
| <b>Mohri, H. &amp; K. Horiuchi</b> (1961)  | M       |
| <i>J. exp. Biol.</i> , 38 : 249-58   | 8-07126 |
| Studies on the respiration of sea-urchin spermatozoa. 3. Respiratory quotient  |         |
| <b>Robson, E. A.</b> (1961)  | M       |
| <i>J. exp. Biol.</i> , 38 : 343-64   | 8-07127 |
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**Menzies, R. J. (1963)**

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*Ann. Mag. nat. Hist.* (13), 5 (55) : 402-6

A new species of monoplacophoran mollusc, *Neopilina* (*Neopilina*) *veleronis* from the slope of the Cedros Trench, Mexico

Ci 581693; 59-6260; 60-0094; 61-06446; 61-10993. Animals reported there are smaller than those previously described but nevertheless sexually mature. Contrary to preliminary report, the specimens have five and not six pairs of gills. Accordingly place in subgenus *Neopilina* rather than subgenus *Vema*.

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Cells in nodules in the abdominal cavity in diabetic rats are of giant size in comparison with the normal forms.

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A popular article, advocating the destructiveness of harpoon fishing and its effects on the fish fauna.

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- Present biennial issue brings up to date the statistics relating to international trade in fishery products, up to and including 1960-61. In each of the commodity sections a new table has been inserted showing for principal exporting countries the breakdown of their exports by commodity sub-groups. Coverage has been extended by adding approximately 20 countries, now comprising import and export data for 125 countries or customs territories. Mainland China remains the only fishing country with significant exports still omitted. Selection of principal exporting countries and commodity sub-groups for detailed tables has been made as in previous volume. Titles of tables have been brought into line with FAO international standard statistical classification of fishery commodities.

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Do 61-453me.

**Pape, A.** (1961) F  
8-07220  
*Fischwirt*, 11 (10) : 301-8

Hat die Binnenfischerei Schleswig-Holsteins noch Möglichkeiten zur Erzeugungssteigerung? (Are there possibilities to increase the yield of the freshwater fisheries in Schleswig-Holstein?)

Economical review and prospect.

**Kondracki, J. & M. Szostak** (1960) F  
8-07221  
*Roczn. Nauk rol.*, (B), 77 (1) : 5-59

Zarys geomorfologiczny i hydrograficzny jezior okolic Węgorzewa (The outline of geomorphology and hydrography of lakes in Węgorzewo district).  
Pl Ru En

Outlines investigations to ascertain a simplified method of fish management.

## AQUATIC STOCKS

**Parin, N. V.** (1961) M  
8-07222  
*Vopr. Ikhtiol.*, 1 (20) : 391-4

*Oxyporamphus meristocystis* (Pisces Oxyporamphidae)—novyi vid letuchego poluryla iz vod Indo-Malaiskogo arhipelaga (*Oxyporamphus meristocystis* (Pisces Oxyporamphidae)—a new species from the waters of the Indo-Malayan Archipelago)



- Paraketsov, I. A. & D. A. Shubnikov** (1961) M  
8-07223  
*Vopr. Ikhtiol.*, 1 (20) : 395-8

Gibrid mezhdu dvumia vidami kambal *Platessa quadrituberculata* (Pallas) i *Pleuronectes stellatus* (Pallas) iz Bristol'skogo zaliva (A hybrid of two species — *Platessa quadrituberculata* (Pallas) and *Pleuronectes stellatus* (Pallas) — of the Bristol Bay)

- Aslanova, N. E.** (1961) M  
8-07224  
*Vopr. Ikhtiol.*, 1 (20) : 564-9  
 Mechenie promyslovykh ryb (Tagging of commercial fish)

- Hughes, G. M.** (1960) M  
8-07225  
*J. exp. Biol.*, 37 : 11-27  
 The mechanism of gill ventilation in the dogfish and skate

Deals with *Scyliorhinus canicula* and *Raia clavata*.

- Hughes, G. M.** (1960) M  
8-07226  
*J. exp. Biol.*, 37 : 28-45  
 A comparative study of gill ventilation in marine teleosts

Observations on *Trachurus trachurus*, *Clupea harengus*, *Gadus merlangus*, *Onos mustela*, *Crenilabrus melops*, *Cottus bubalis*, *Blennius ocellaris*, *Trigla gurnardus*, *Callionymus lyra*, *Pleuronectes platessa*, *Microstomus kitt*, *Conger conger*, *Syngnathus acus*.

- Samejima, T. & J. T. Yang** (1964) M  
8-07227  
*J. molec. Biol.*, 8 (6) : 863-72  
 Optical rotatory dispersion of sperm-whale myoglobin and its derivatives

- Satchell, G. H.** (1960) M  
8-07228  
*J. exp. Biol.*, 37 : 719-31  
 The reflex-coordination of the heart beat with respiration in the dogfish

Describes from the result of experiments on *Squalus lebruni*, the branchio-cardiac coordination and mechanism affecting it.

- Robertson, J. D.** (1960) M  
8-07229  
*J. exp. Biol.*, 37 : 879-88

Studies on the chemical composition of muscle tissue. 1. The muscles of the hagfish *Myxine glutinosa* L. and the Roman eel *Muraena helena* L.

Deals with composition of the muscles, particularly from the standpoints of osmotic concentration of various constituents and the accumulation on reduction of ions in muscle relative to those of the blood-plasma or serum.

- M  
8-07230
- Riegel, J. A. & A. P. M. Lockwood** (1961)  
*J. exp. Biol.*, 38 : 491-500  
 The role of the antennal gland in the osmotic and ionic regulation of *Carcinus maenas*
- M  
8-07231
- Satchell, G. H.** (1961)  
*J. exp. Biol.*, 38 : 531-44  
 The response of the dogfish to anoxia
- M  
8-07232
- Fänge, R. & K. Fugelli** (1962)  
*Nature, Lond.*, 196 (4855) : 689  
 Osmoregulation in chimaeroid fishes
- Reports results of analysis of blood plasma of *Chimaera monstrosa* for sodium, potassium, chloride and urea. Discusses osmoregulation process in comparison with *Squalus acanthias* and *Myxine glutinosa*.
- M  
8-07233
- Wheeler, A.** (1962)  
*Nature, Lond.*, 196 (4855) : 689-90  
 New records for distribution of the frilled shark
- New occurrence of *Chlamydoselachus anguineus*, in the northeastern Atlantic.
- M  
8-07234
- Murray, R. W.** (1962)  
*J. exp. Biol.*, 39 : 119-28  
 The response of the ampullae of Lorenzini of elasmobranchs to electrical stimulation
- M  
8-07235
- Satchell, G. H. & H. K. Way** (1962)  
*J. exp. Biol.*, 39 : 243-50  
 Pharyngeal proprioceptors in the dogfish *Squalus acanthias* L.
- M  
8-07236
- Iliescu, M.** (1962)  
*Bul. Inst. Cerc. pisc.*, 21 (1) : 36-45  
 Observații asupra prezenței, comportării și componenței cîrdurilor de hamsic la litoralul românesc al mării Negre (Observations on the presence, the disposition and the composition of anchovy shoals off the Roumanian coast of the Black Sea). Ro Ru Fr
- Study based on observations carried out during 1954-1960. Contains remarks on the ecology and relations of *Engraulis encrasicolus ponticus*.
- M  
8-07237
- Satchell, G. H.** (1962)  
*J. exp. Biol.*, 39 : 503-12  
 Intrinsic vasomotion in the dogfish gill
- Experiments carried out on 26 specimens of *Squalus acanthias*. The fish were anaesthetized and curarized.

- M  
8-07238
- Barraclough, W. E. & T. H. Butler** (1961)  
*J. Fish. Res. Bd Can.*, 18 (6) : 1167-9  
Additional records of the argentinid fish, *Leuroglossus stilbius* Gilbert, from British Columbia, with remarks on its taxonomy.
- M  
8-07239
- Southward, G. M.** (1962)  
*J. Fish. Res. Bd Can.*, 19 (2) : 339-62  
A method of calculating body lengths from otolith measurements for Pacific halibut and its application to Portlock-Albatross grounds data between 1935 and 1957  
  
Changes in growth rate are measured by otolith studies, and the method checked by comparison with otoliths obtained from recovered tagged fish.
- M  
8-07240
- Pike, G.** (1962)  
*J. Fish. Res. Bd Can.*, 19 (2) : 363-  
First record of the great white shark (*Carcharodon carcharias*) from British Columbia
- M  
8-07241
- Anon.** (1962)\*  
London, H.M.S.O., Cmnd (1817)  
Whaling. Arrangements for the regulation of Antarctic pelagic whaling
- M  
8-07242
- Mansueti, R. J.** (1962)  
*Quart. Rev. Biol.*, 37 (1) : 52-3  
Fishes of the Marshall and Marianas Islands. Vol. 2: Families from Mullidae through Stromateidae  
  
Re 61-03244.
- M  
8-07243
- Cautiș, I. & M. Iliescu** (1962)  
*Bull. Inst. Cerc. pisc.*, 21 (2) : 46-58  
Caracteristicile cîrduirilor de șprot, hamsie și stavrid și comportarea lor în condițiile excepționale ale anului 1961 de la coasta românească a Mării Negre (The characteristics of sprat, anchovy and horse mackerel and their behaviour in the exceptional conditions of the year 1961 on the Roumanian coast of the Black Sea). Ro Ru Fr
- M  
8-07244
- Luscan, S. V.** (1962)  
*Bull. Inst. Cerc. pisc.*, 21 (2) : 59-73  
Componența pe vîrste a aglomerărilor de calcan pescuite la litoralul românesc în perioada 1959-1961 (The composition of age groups in the agglomerations of turbot caught at the Roumanian coast in 1959-1961). Ro Ru Fr
- M  
8-07245
- Van Rooyen, W.** (1962)  
*Africana*, (2) : 28-31  
Marlin of Africa

- Berner, M.** (1960) M  
8-07246  
*Fischereiforsch.*, 3 (5/6) : 6-8  
 Die Ostseedorscherträge 1959 und die Fangaussichten 1960 (The yield of Baltic haddock in 1959 and production forecast for 1960)  
 Analyzes statistical data as to frequencies in relation to gear and growth rate; suggests protective measures for undersized haddock.
- Martinkowitz, H.** (1960) M  
8-07247  
*Fischereiforsch.*, 3 (5/6) : 9-13  
 Erste Ergebnisse von Blankaalmarkierungen an der ostrügenschen Küste im Herbst 1959 (First results of silver-eel tagging off Rügen during autumn 1959)  
 Describes tagging method and aim; recapture data as to speed of migration and direction.
- Aker, E.** (1961) M  
8-07248  
*Ber. dtsh. Komm. Meeresforsch.*, 16 (2) : 128 p.  
 Untersuchungen über die Biologie der Makrele (*Scomber scombrus* L.) in der Nordsee (Investigations on the biology of the mackerel (*Scomber scombrus* L.) in the North Sea)  
 Describes methods of age determination and reports on age-weight and length measurements, sex relation of population, development of gonads and number of eggs in relation to gonad volume.
- Fesołowicz, W.** (Kulerski, W., Transl.) (1962)\* M  
8-07249  
 OTS 60-21283, 9 p.  
 Studies on the stock of Pomeranian Bay spawning spring herring in 1950-1954  
*En* 59-3043.
- Hognestad, P. T.** (1962)\* M  
8-07250  
*Astarte*, (2) : 13 p.  
 The deal-fish, *Trachypterus arcticus* Brünnich, in north Norway
- Doi, T.** (1962) M  
8-07251  
 Mimeo, 4 p.  
 Dynamical relationships between variations of the Antarctic fin whale catch and catcher's day's work  
 Do 62-369me.
- Kurogane, K. & T. Nemoto** (1962) M  
8-07252  
 Mimeo, 13 p.  
 The influence of meteorological factors on the Antarctic whaling  
 Do 62-369me.



- M  
8-07253
- Fujino, K.** (1962)  
Mimeo, 4 p.  
Blood typing fin whales as an aid in identifying stock units in the Antarctic  
Do 62-369me.
- M  
8-07254
- Omura, H. & S. Ohsumi** (1962)  
Mimeo, 4 p.  
A review of Japanese whale marking in the North Pacific, with some information on marking in the Antarctic  
Do 62-369me.
- M  
8-07255
- Ichihara, T.** (1962)  
Mimeo, 2 p.  
A note on pigmy blue whale  
Do 61-369me.
- MF  
8-07256
- Manlian, R. A.** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 403-11  
O sushchestvovanii lokal'nykh stad u anchousovidnoi kil'ki *Clupeonella engrauliformis* Borodin (On the existence of local stocks of *Clupeonella engrauliformis* (Borodin) )
- MF  
8-07257
- Egorova, T. V. et al.** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 439-47  
Prichiny kolebanii chislennosti krasnoi r. Ozernoi (Causes of fluctuations in the abundance of *Oncorhynchus nerka* (Walbaum) of the Ozeraya River (Kamchatka) )
- MF  
8-07258
- Beliaeva, V. N. & I. V. Nikanorov** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 513-8  
O prichinakh privilecheniia ryb na svet (On the attraction of fish by light)
- MF  
8-07259
- Protasov, V. R.** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 519-32  
O reaktsiiakh ryb na svet sviazi s osobennostiami ikh svetovospriiatiia (On the reactions of fish to light with reference to peculiarities of their perception)
- MF  
8-07260
- Karpevich, A. F. & E. N. Bokova** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 552-63  
Peresadky ryb i vodnykh bespozvonochnykh, provedennnye v SSSR v 1957-1959 gg. (Transplantations of fish and aquatic invertebrates in the USSR in 1957-1959)

**Kukucz, J. T.** (1962)MF  
8-07261*In* 8-07031 : 76-7Effects of biological factors (sex, seasonal races, spawning migrations) on fat, protein and water; their distribution in sea-trout (*Salmo trutta* L.)**Singh, K. S.** (1962)MF  
8-07262*Wild. Dis.*, 29 : 22 p.

Helminths of India. Part 3. Nematoda

Co 8-05324. Third instalment of checklist incl. parasites reported from reptiles, amphibians and fishes. 116 references.

**Singh, K. S.** (1962)MF  
8-07263*Wild. Dis.*, 30 : 6 p.

Helminths of India. Part 4. Acanthocephala

Co 8-07262. Fourth instalment of checklist incl. parasites reported from reptiles, amphibians and fishes.

**Zhadin, V. I.** (Taylor, G. R., Transl.) (d.u.)MF  
8-07264

Mimeo, 10 p.

The use of radioactive isotopes in hydrobiology and fish breeding

*En* 60-7198. Brief account of use of radioactive isotopes in study of use of fertilizers, migration of fish, and biological productivity of waters.**Lishev, M. N. & E. Ia. Rimsh** (1961)\*MF  
8-07265*Trud. latviisk. Otd. vsesoiuz. nauch.-issled. Inst. morsk. ryb. Khoz.*, 3 : 5-103

Nekotorye zakonomernosti dinamiki chislennosti baltiiskogo lososia (Patterns and principles in the dynamics of abundance of Baltic salmon)

**Lishev, M. N. & E. Ya. Rimsh** (1962)MF  
8-07266*Transl. Ser. Fish. Res. Bd Can.*, (395) : 6 p.

Patterns and principles in the dynamics of abundance of Baltic salmon

*En* 8-07265. Conclusions only, references to *S. salar* of Latvia, E. Baltic. History of fishery; factors affecting survival. Proposals for international regulation.**Chudova, Z. I.** (1961)MF  
8-07267*Trud. latviisk. Otd. vsesoiuz. nauch.-issled. Inst. morsk. ryb. Khoz.*, 3 : 421-9Rol vitaminov A i B<sub>1</sub> v vyrashchivanii molodi lososia (The role of vitamins A and B<sub>1</sub> in rearing young salmon)

- Chudova, Z. I.** (1962) MF  
8-07268  
*Transl. Ser. Fish. Res. Bd Can.*, (396) : 2 p.  
The role of vitamins A and B<sub>1</sub> in rearing young salmon  
*En* 8-07267. Summary only. Effects of vitamin deficiency on coloration, nerves, eyes and activity are described. Presumably references to *S. salar*.
- McAllister, D. E.** (1963) MF  
8-07269  
*Biol. Ser. nat. Mus. Ottawa*, (71) : 53 p.  
A revision of the smelt family, Osmeridae
- Pillai, T. V. R.** (1959)\* MF  
8-07270  
*Curr. Sci.*, (28) : 212-3  
Inexpensive tag for marking hilsa  
BSEA 5 (7) 3689.
- Eylar, E. H. & R. F. Doolittle** (1962) MF  
8-07271  
*Nature, Lond.*, 193 (4821) : 1183-4  
Sialic acid from blood cells of the lamprey eel  
Reports investigations on *Petromyzon marinus*.
- Osborne, M. F. M.** (1961) MF  
8-07272  
*J. exp. Biol.*, 38 : 365-90  
The hydrodynamical performance of migratory salmon
- Parry, G.** (1961) MF  
8-07273  
*J. exp. Biol.*, 38 : 411-28  
Osmotic and ionic changes in blood and muscle of migrating salmonids
- Mirică, Gh.** (1962) MF  
8-07274  
*Bul. Inst. Cerc. pisc.*, 21 (1) : 5-13  
Zona maritimă a deltei Dunării și perspectivele dezvoltării pisciculturii în R.P.R. (The maritime zone of the Danube delta and the perspectives of development of fishculture in Roumania). Ro Ru Fr
- Fraser, D. I., A. Mannan & W. J. Dyer** (1961) MF  
8-07275  
*J. Fish. Res. Bd Can.*, 18 (6) : 893-905  
Proximate composition of Canadian Atlantic fish. 3. Sectional differences in the flesh of a species of Chondrostei, one of Chimaerae, and of some miscellaneous teleosts  
Proximate analyses of sections of the flesh of several teleosts and also of a sturgeon and a Chimaera.

- MF  
8-07276
- Vladykov, V. D. & G. N. Mukerji** (1961)  
*J. Fish. Res. Bd Can.*, 18 (6) : 1125-43

Order of succession of different types of infraoral lamina in landlocked sea lamprey (*Petromyzon marinus*)

Infraoral lamina were studied of 630 lampreys from lake Erie, Ontario, lake Seneca, New York, and the Père Marquette River, Michigan.

- MF  
8-07277
- Parker, R. R.** (1962)  
*J. Fish. Res. Bd Can.*, 19 (2) : 315-20

Tag failure associated with a net fishery as a source of experimental error

Tags may be forcibly separated from fish on recapture by experiments on maturing chinook salmon, *Oncorhynchus tshawytscha* in Alaska.

- MF  
8-07278
- McBride, J. R. et al.** (1962)  
*J. Fish. Res. Bd Can.*, 19 (2) : 327-34

Olfactory perception in juvenile salmon. 1. Observations on response of juvenile sockeye to extracts of foods

Introduction of aqueous extracts of natural foods into an aquarium holding juvenile sockeye salmon, *Oncorhynchus nerka*, obtained from a lake in British Columbia, Canada, evoked exploratory and feeding responses in fish that had previously eaten the foods, but failed to do so in fish that had not.

- MF  
8-07279
- Stunkard, H. W.** (1962)  
*Quart. Rev. Biol.*, 37 (1) : 23-34

The organization, ontogeny, and orientation of the Cestoda

Refers to parasites of aquatic fauna, and also to strobilization in *Aurellia*.

- MF  
8-07280
- Lühmann, M. & H. Mann** (1961)  
*Fischwirt*, 11 (12) : 365-75

Über die Wanderung der Aale in der Elbe (On eel migration in the Elbe River)

Reviews literature and reports on tagging results in relation to migration and dislocation intensity.

- MF  
8-07281
- Gorman, T.** (1962)\*  
*Fish. tech. Rep. N.Z. Mar. Dep.*, (7) : 20 p.

Yellow-eyed mullet, *Aldrichetta forsteri* (Cuvier and Valenciennes) in lake Ellesmere

Notes on the fishery and report of experimental netting to determine the compositions on length/weight relation, size composition and population structure and spawning.



- Furukawa, A.** (1962)  
U.N., E/CONF. 39/C/444  
Shallow sea and inland sea fish and shell-fish cultural techniques, particularly artificial seed culture development  
Do 61-453me.
- MF  
8-07282
- Chen, T.-P.** (1962)  
U.N., E/CONF. 39/C/129  
Improvement of milkfish culture in Taiwan, Republic of China  
Do 61-453me.
- MF  
8-07283
- Llewellyn, J.** (1963)\*  
In 8-07047.  
Larvae and larval development of monogeneans
- MF  
8-07284
- Kuronuma, K.** (1961)\*  
Saigon, U.S. Operations Mission to Vietnam, Division of Agriculture and Natural Resources  
A check list of fishes of Vietnam
- MF  
8-07285
- Lühmann, M. & H. Mann** (1961)  
*Fischwirt*, 11 (6) : 165-77  
Untersuchungen über den Aalfang in der Elbe (Researches on the eel fishery in the Elbe River)  
Gives statistical account on the share of eels in the total fish production.
- MF  
8-07286
- Herrmann, G.** (1961)  
*Fischwirt*, 11 (6) : 178-83  
Aalwirtschaft in Schleswig-Holstein (Eel management in Schleswig-Holstein)  
Reports on improvement methods in fish production under given conditions, favouring certain species.
- MF  
8-07287
- Bräutigam, R.** (1960)  
*Fischereiforsch.*, 3 (3) : 3-6  
Untersuchung der relativen Gestaltsspannung und Reizstromstärke des Aales in Wasser mit unterschiedlichem Salzgehalt (Investigation into the relative body voltage and current intensity stimulating the eel in water of different salt contents)  
Describes experiments and discusses results in the light of practical application of electricity to the capture of fish.
- MF  
8-07288

**Diurko, I.** (1961)F  
8-07289*Vopr. Ikhtiol.*, 1 (20) : 399-402Ob areale i faktorakh rasprostraneniia podusta (On the distribution area of *Chondrostoma* and factors determining their distribution)**Tatarko, K. I.** (1961)F  
8-07290*Vopr. Ikhtiol.*, 1 (20) : 412-20Anomalii v stroenii zhabernoï kryshki i plavinkov karpa (Anomalies in the opercle and fins of *Cyprinus carpio*)**Shpet, G. I.** (1961)F  
8-07291*Vopr. Ikhtiol.*, 1 (20) : 421-Novoobrazovanie cheshun u dvukhletnego zerkal'nogo karpa (*Cyprinus carpio* L.) pod vlianiem razdrazheniia (New formation of the scales in two-year-old carp (*Cyprinus carpio* L.) under the influence of irritation)**Gudimovich, P. K.** (1961)F  
8-07292*Vopr. Ikhtiol.*, 1 (20) : 435-8

Leshch ozera Imnati (Bream of the Imnaty Lake)

**Dormidontov, A. S.** (1961)F  
8-07293*Vopr. Ikhtiol.*, 1 (20) : 453-61

Osobennosti raspredeleniia Ienskikh sitovykh na mestakh ikh nagula (Peculiarities in the distribution of the Lena coregonids on feeding grounds)

**Krasikova, V. A.** (1961)F  
8-07294*Vopr. Ikhtiol.*, 1 (20) : 462-7Ozernaia tseliad' *Coregonus peled* (Gmelin) iz ozera Makovskogo (*Coregonus peled* (Gmelin) of the Makovsky Lake)**Popova, M. S.** (1961)F  
8-07295*Vopr. Ikhtiol.*, 1 (20) : 468-80Materialy po morfologii i biologii sheman *Chalcalburnus chalcoides schischkovi*, Drensky, akklimatizirovannoi v Sengileevskom vodokhranilishe Stavropol'skogo kraia (Notes of morphology and biology of *Chalcalburnus chalcoides schischkovi*, Drensky, from Sengelei reservoir)**Belyi, N. D.** (1961)F  
8-07296*Vopr. Ikhtiol.*, 1 (20) : 481-90Razmnozhenie *Rutilus rutilus heckeli* (Nord.) v nizov'iakh Dnepra na iskusstvennykh gnezdkakh (Propagation of *Rutilus rutilus heckeli* (Nord.) on artificial spawning grounds in the lower reaches of the Dnieper)

- F  
8-07297
- Turdakov, A. F.** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 491-6  
 Partenogeneticheskoe razvitiye issykkul'skogo chebachka *Leuciscus bergi* Kashkarov (Parthenogenetic development of *Leuciscus bergi* Kashkarov of the Issyk-Kul Lake)
- F  
8-07298
- Liubitskaia, A. I. & E. A. Dorofeeva** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 497-509  
 Vliianie vidimogo sveta ul'trafiioletovykh luchei i temperatury na metameriiu tela ryb. Soobshchenie 3 (Effect of visible light, ultraviolet rays and temperature on body metamerism)
- F  
8-07299
- Naumova, A. N.** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 510-2  
 Sravitel'noe izuchenie ROE u molodi ryb pri invaziakh (Comparative investigations of erythrocyte sedimentation rate in young fish during parasites invasion)
- F  
8-07300
- Kuderskii, L. A.** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 533-41  
 O vnutrividovykh pishchevykh vzaimootnosheniakh u sudaka *Lucioperca lucioperca* L. (On intraspecific food relations in *Lucioperca lucioperca* L.)
- F  
8-07301
- Vershinin, N. V.** (1961)  
*Vopr. Ikhtiol.*, 1 (20) : 542-51  
 Pitanie molodi sigovykh ryb v nizhnei Lene (Feeding of the coregonid young in the Lower Lena)
- F  
8-07302
- Issa, G. I.** (1962)  
*Wild. Dis.*, 31 : 7 p.  
 Description of *Acanthostomum niloticus* n. sp. and *Acanthostomum spiniceps knobus* n. sub. sp. (Trematoda, Acanthostomidae) from the river Nile, Egypt  
*A. niloticus* n. sp. differs from other spp. of this group of fish parasites by having a gonotyl. *A. spiniceps knobus* n. sub. sp. is similar but has no gonotyl.
- F  
8-07303
- Machin, K. E. & H. W. Lissman** (1960)  
*J. exp. Biol.*, 37 : 801-11  
 The mode of operation of the electric receptors in *Gymnarchus niloticus*
- F  
8-07304
- Shelton, G.** (1961)  
*J. exp. Biol.*, 38 : 79-92  
 The respiratory centre in the tench (*Tinca tinca* L.). 2. Respiratory neuronal activity in the medulla oblongata

**Anthony, E. H.** (1961)

F  
8-07305

*J. exp. Biol.*, 38 : 93-108

The oxygen capacity of goldfish (*Carassius auratus* L.) blood in relation to thermal environment

Reports the results of measuring oxygen capacity of blood from goldfish acclimatized to temperatures near the extremes of their range.

**Anthony, E. H.** (1961)

F  
8-07306

*J. exp. Biol.*, 38 : 109-26

Survival of goldfish in presence of carbon monoxide

Tests importance of Hb for certain aspects of goldfish respiration by converting it to COHb. CO<sub>2</sub> does not indicate an effect upon Hb.

**Alexander, R. McN.** (1961)

F  
8-07307

*J. exp. Biol.*, 38 : 403-10

The physical properties of the swimbladders of some South American Cypriniformes

**Lloyd, R.** (1961)

F  
8-07308

*J. exp. Biol.*, 38 : 447-56

Effect of dissolved oxygen concentrations on the toxicity of several poisons to rainbow trout (*Salmo gairdneri* Richardson)

**Swift, D. R.** (1961)

F  
8-07309

*J. exp. Biol.*, 38 : 595-604

The annual growth-rate in brown trout (*Salmo trutta* Linn.) and its cause

**Gordon, M. S. et al.** (1961)

F  
8-07310

*J. exp. Biol.*, 38 : 659-78

Osmotic regulation in the crab-eating frog (*Rana cancrivora*)

**Alexander, R. McN.** (1961)

F  
8-07311

*J. exp. Biol.*, 38 : 747-58

Visco-elastic properties of the tunica externa of the swimbladder in Cyprinidae

**Schmidt-Nielsen, K. & P. Lee** (1962)

F  
8-07312

*J. exp. Biol.*, 39 : 167-77

Kidney function in the crab-eating frog (*Rana cancrivora*)



- Szabó, S.** (1962) F  
8-07313  
*Bul. Inst. Cerc. pisc.*, 21 (1) : 46-60

Condițiile abiotice de reproducere a scobarului (*Chondrostoma nasus* (L.)) și mrenei (*Barbus barbus* (L.)) (Effect of the abiotic conditions on the reproduction of *Chondrostoma nasus* (L.) and *Barbus barbus* (L.))

Ecological study based on observations in Transylvanian rivers.

- Leonte, V. et al.** (1962) F  
8-07314  
*Bul. Inst. Cerc. pisc.*, 21 (1) : 61-79

Pepiniera piscicolă Sarinasuf în primul an de funcționare (The fish hatchery of Sarinasuf during its first year of activity). Ro Ru Fr

Describes preparatory works, the environmental conditions and results obtained in rearing carp.

- Howland, H. C. & B. Howland** (1962) F  
8-07315  
*J. exp. Biol.*, 39 : 491-502

The reaction of a blinded goldfish to rotation in a centrifuge

- Bainbridge, R.** (1962) F  
8-07316  
*J. exp. Biol.*, 39 : 537-56

Training, speed and stamina in trout

A number of trout *Salmo irideus* were kept continuously swimming for a period of 12 months in experimental tanks in which the water was made to rotate at a mean speed of 25 cm/sec.

- Roots, B. I. & C. L. Prosser** (1962) F  
8-07317  
*J. exp. Biol.*, 39 : 617-30

Temperature acclimation and the nervous system in fish

Experiments carried out with *Carassius auratus* L., *Lepomis macrochirus* Rafinesque, *Lepomis cyanellus* and *Ameiurus melas* Rafinesque.

- McCrimmon, H. R.** (1961) F  
8-07318  
*J. Fish. Res. Bd Can.*, 18 (6) : 1153-8

Seasonal fishing quality provided by the natural reproduction of speckled trout in three Ontario ponds

Concludes that natural reproduction and the continuous recruitment of smaller fish into the size group susceptible to angling was at least adequate to maintain the standing population of catchable trout at a level necessary to provide a consistent quality of angling throughout the fishing season.

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*J. Fish. Res. Bd Can.*, 19 (2) : 173-200

F  
 8-07319

Comparison of inlet and outlet spawning runs of rainbow trout in Loon Lake, British Columbia

Tagging experiments on *Salmo gairdneri*; comparative statistics on size, sex ratio, survival and diel movement of spawning fish.

**Northcote, T. G.** (1962)  
*J. Fish. Res. Bd Can.*, 19 (2) : 201-70

F  
 8-07320

Migratory behaviour of juvenile rainbow trout, *Salmo gairdneri*, in outlet and inlet streams of Loon Lake, British Columbia

Marked differences in response to water current, shown by fish migrating into the lake from its outlet and inlet streams were studied both in the field and laboratory.

**Merla, G.** (1961)  
*Z. Fisch.*, 10 (1/3) : 21-8

F  
 8-07321

Bedeutung der Eintagsfliegenlarven (Ephemeroptera) im Karpfenteich (On the importance of dayfly larvae (Ephemeroptera) in the carp pond).  
 En Ru

Reports on examination of intestine contents of carp and stresses nutritional importance of *Caenis* and *Cloeon* in time of food deficiency.

**Maier, Ch.** (1962)  
*Z. Fisch.*, 10 (1/3) : 29-68

F  
 8-07322

Untersuchungen über die Verfettung der Leber des Karpfens (*Cyprinus carpio*) (Investigations of the fatty degeneration of carp liver (*Cyprinus carpio*)). En Ru

Comprehensive picture on the anatomy of carp liver. Describes experiments carried out in the Zoological Institute of the University Erlangen. Reviews literature.

**Anwand, K.** (1961)  
*Z. Fisch.*, 10 (1/3) : 69-104

F  
 8-07323

Biometrische Untersuchungen an Karpfen aus der Teichwirtschaft Peitz (Biometrical investigations of carp in the pond farm Peitz). En Ru

Results obtained agree mostly with those obtained by other authors. Bibliography.

- Rudziński, E.** (1961) F  
8-07324  
*Z. Fisch.*, 10 (1/3) : 105-35

Vergleichende Untersuchungen über den Wildkarpfen der Donau und den Teichkarpfen (Comparative investigations of the wild Danube carp and the pond carp). En Ru

Describes biometrical studies and reviews literature in the light of own results gained.

- Kirpitschnikow, V. S.** (1961) F  
8-07325  
*Z. Fisch.*, 10 (1/3) : 137-63

Die genetischen Methoden der Selektion in der Karpfenzucht (The genetical methods of selection in carp raising). En Ru

- Jászfalusi, L. & J. Páskándy** (1961) F  
8-07326  
*Z. Fisch.*, 10 (1/3) : 165-72

A. Wirkung der Lebensbedingungen auf Veränderungen der Körperform des Edelkarpfens (*Cyprinus carpio* L.). B. Angaben über vergleichende Untersuchungen der Wachstumsfähigkeit ein- und zweisömmeriger Edelkarpfen (A. The influence of living conditions on the body conformation of pond carp. B. Notes on comparative investigations into the growth possibilities of one- and two-year-old carp). En Ru

- Müller, K.** (1961) F  
8-07327  
*Z. Fisch.*, 10 (1/3) : 173-201

Die Biologie der Äsche (*Thymallus thymallus* L.) im Lule Älv (Schwedisch Lappland) (The biology of the grayling (*Thymallus thymallus* L.) in the Lule Älv—Swedish Lapland). En Ru

Deals with the occurrence, distribution, growth and nutrition of grayling.

- Mansueti, R. J.** (1962) F  
8-07328  
*Quart. Rev. Biol.*, 37 (1) : 52-3

A revision of certain *Barbus* (Pisces, Cyprinidae) from east, central and south Africa

Re 62-06772.

- Niculescu-Duvăz, M., Gr. Roșca & E. Rarinca** (1962) F  
8-07329  
*Bull. Inst. Cerc. Pisc.*, 21 (2) : 11-28

Introducerea furajelor granulate în alimentația suplimentară a crapului din crescătoriile intensive (The introduction of granulous fodder as supplementary food for carp in intensive culture). Ro Ru Fr

- Costea, E. & A. Cristian** (1962) F  
8-07330  
*Bull. Inst. Cerc. pisc.*, 21 (2) : 29-42

Cercetări si experimentări privind creșterea hibridilor rezultați din încrucișarea crapului cu carasul roșu (Investigations and experiments regarding the cross breeding of carp and gold fish). Ro Ru Fr

**Rădulescu, I. & N. Suceveanu (1962)**F  
8-07331*Bull. Inst. Cerc. pisc.*, 21 (2) : 43-5

Acțiunea drojdiei de bere furajere—adăugată la hrană—asupra rezistenței la boală a crapului de cultură (The action of fodder ferments, added to food, on disease resistance in carp culture). *Ro Ru Fr*

**Van Zyl, J. (1962)**F  
8-07332*Africana*, (1) : 30-1

The rainbow and the brown

Popular review of trout fishing in East and South Africa.

**Anthony, S. (1962)**F  
8-07333*Africana*, (3) : 25

Tiger

Reports on *Hydrocyon vittatus* to be found in many of the big lakes south of the Sahara.

**Czeczuga, B. (1959)**F  
8-07334*Roczn. Nauk rol.*, (B), 74 (3) : 497-508

Pokarm i przyrost wymiarów ciała (długość) sielawy (*Coregonus albula* L.) w jez. Rajgrodzkim (Feed and body increments (length) in *Coregonus albula* (L.) in lake Rajgrodzke). *Pl Ru En*

Notes selective zooplankton feeding of this species in a lake in north-eastern Poland, and gives basis for determining growth.

**Einsele, W. (1961?)**F  
8-07335*Öst. Fisch.*, Suppl. 1 (1) : 18 p.

Untersuchungen über die Atmungsphysiologie sich entwickelnder Salmonideneier; ihre Anwendung auf die Natur und auf die züchterische Technik (Investigations of the respiration physiology of developing salmonid eggs; their application in nature and in breeding techniques)

Reports on H<sub>2</sub>O, temperature and O<sub>2</sub> demands of trout and white fish (*Coregonus*) eggs during the incubation period and describes technical devices for hatcheries and breeding stations.

**Wiesner, E. R. (1961)**F  
8-07336*Allg. FischZtg.*, 87 (1) : 18-21

Temperatur und Fütterung in der Forellenteichwirtschaft (Temperature and feeding in trout farms)

Discussion on economics.



# AQUATIC STOCKS

**Bank, O.** (1961)

F  
8-07337

*Allg. FischZtg.*, 86 (17) : 536-7

Ein leistungsfähiges Gerät für die Spritzung BWS-kranker Karpfen (An efficient instrument for injecting dropsy-ill carp)

Technical description and explanation.

**Nawar, G. & E. G. Yoakim** (1963)

F  
8-07338

*Ann. Mag. nat. Hist.* (13), 5 (55) : 385-9

A study in the fecundity of the Nile cat-fish *Clarias lazera* Valenciennes in Cuvier and Valenciennes 1840

Ci 1937, U. B. Stone; 1940, V. D. Vladikov & V. Legendre; 58-1824. Based on examination of 178 females collected from Cairo fish market which is mainly supplied from lake Mataria, during period 30 Jun. to 12 Sep. 1961. Fecundity of each determined by volumetric method. Average diameter of ova determined according to Vladikov & Legendre (1940). Generally fecundity is a function of the length of the specimen.

**Cairns, J., Jr. & A. Scheier** (1962)

F  
8-07339

*Notul. Nat. Acad. Philad.*, (353) : 12 p.

The effects of temperature and water hardness upon the toxicity of naphthenic acids to the common bluegill sunfish, *Lepomis macrochirus* Raf., and the pond snail, *Physa heterostropha* Say

**Iman, A. E. & M. T. Hashem** (1960)\*

F  
8-07340

*Notes hydrobiol. Dep. Minist. Agric. U.A.R.*, (51) : 17 p.

Notes on the breeding, behaviour, embryonic and larval development, of *Tilapia zillii* Gervais

**Iman, A. E. & M. T. Hashem** (1960)\*

F  
8-07341

*Notes hydrobiol. Dep. Minist. Agric. U.A.R.*, (54) : 10 p.

Spawning and development of common carp (*Cyprinus carpio*) in Egyptian ponds

**Brown, W. H.** (1961)\*

F  
8-07342

*Bull. Tex. Game Comm.*, (39) : 11 p.

The fresh-water catfishes of Texas, and how to know them

**Huet, M.** (1962)

F  
8-07343

U.N., E/CONF. 39/C/402

Fish breeding in tropical regions

Do 61-453me.

**Bard, J.** (1962)F  
8-07344

U.N., E/CONF. 39/C/290

Fish breeding techniques developed in Africa and their practical results

Do 61-453me.

**Zarneki, S. et al.** (1961)F  
8-07345*Roczn. Nauk rol. (B)*, 78 (2) : 343-55

Przyrosty 'pośpiechów' karpia w obsadach mieszanych z przeciętnymi (Doświadczenia 2-letnie 1955 i 1956) (The increase of growth of 'quick growing' carps in groups mixed with average fry—2-year experiment in 1955 and 1956). Ru En

Selective breeding of the largest carp, and comparing their growth with that of average-size fish; positive results are indicated.

**Follenius, E.** (1962)F  
8-07346*C.R. Acad. Sci., Paris*, 255 (25) : 3474-6

Rapports neurovasculaires et neuroglandulaires dans l'hypophyse de quelques poissons. Étude au microscope électronique (Neurovascular and neuroglandular relations in the hypophysis of some fishes. An electronic microscope study)

Preliminary note on observations on trout, perch, guppy, minnow.

**Lassleben** (1961)F  
8-07347*Fischwirt*, 11 (6) : 184-6

Zum Alter der Laichkarpfen (On the age of carp spawners)

**Niewolak, S.** (1960)F  
8-07348*Roczn. Nauk rol., (B)*, 76 (1) : 111-35Badania nad przedłużeniem świeżości leszcza (*Abramis brama* L.) przy użyciu chlorowodoru tetracykliny (Studies on bream (*Abramis brama* L.) keeping quality improvement by application of tetracycline hydrochloride). Pl Ru EnPreliminary studies isolated 36 strains of: *Pseudomonas*, *Achromobacter*, and *Flavobacterium*. Reaction of pure cultures to tetracycline hydrochloride was investigated by the dilution method and by application of paper disks; a minimum concentration to retard development of these bacteria was established (0.5-1 p.p.m.).**Karpińska-Waluś, B.** (1961)F  
8-07349*Roczn. Nauk rol., (B)*, 77 (2) : 329-98Wzrost płoci (*Rutilus rutilus* L.) w jeziorach okolic Węgorzewa (The growth of roach (*Rutilus rutilus* L.) in lakes of Węgorzewo district). Pl Ru En

Analyses rate of growth of roach in 25 lakes.

F  
8-07350

**Zawisza, J. & H. Żurowska** (1961)  
*Roczn. Nauk rol.*, (B), 77 (2) : 399-453

Wzrost wzdreği (*Scardinius erythrophthamus* L.) w jeziorach okolic Węgorzewa) (The growth of rudd (*Scardinius erythrophthamus* L.) in lakes of Węgorzewo district). *Pl Ru En*

Rate of growth determined from scales using the Dahl-Lea method.

F  
8-07351

**Karpińska-Waluś, B.** (1961)  
*Roczn. Nauk rol.*, (B), 77 (2) : 455-91

Tempo wzrostu leszcza (*Abramis brama* L.) w jeziorach okolic Węgorzewa (The rate of growth of bream (*Abramis brama* L.) in lakes of Węgorzewo district). *Pl Ru En*

Growth of bream in 14 lakes was investigated as a part of general investigation of fish growth.

F  
8-07352

**Zawisza, J. & B. Antosiak** (1961)  
*Roczn. Nauk rol.*, (B), 77 (2) : 493-525

Wzrost lina (*Tinca tinca* L.) w jeziorach okolic Węgorzewa (The rate of growth of tench (*Tinca tinca* L.) in lakes of Węgorzewo district). *Pl Ru En*

A study of the age and growth from scales and length-frequency distributions.

F  
8-07353

**Zawisza, J. & B. Antosiak** (1961)  
*Roczn. Nauk rol.*, (B), 77 (2) : 527-48

Tempo wzrostu karasia (*Carassius carassius* L.) w jeziorach okolic Węgorzewa (The rate of growth of crucian carp (*Carassius carassius* L.) in lakes of Węgorzewo district). *Pl Ru En*

The key scale was sampled and used for age determination and back calculation of the length of the body of crucian carp. The body scale ratio is such that it permits the use of the Dahl-Lea formula without correction.

F  
8-07354

**Nagić, M.** (1961)  
*Roczn. Nauk rol.*, (B), 77 (2) : 549-80

Wzrost sandacza (*Lucioperca lucioperca* L.) w jeziorach północnej Polski (The growth of pike-perch (*Lucioperca lucioperca* L.) in north Polish lakes). *Pl Ru En*

Rate of growth determined by back calculation, and because of allometric growth corrected on the basis of a curve of the Segerstrale type.

F  
8-07355

**Antosiak, B.** (1961)  
*Roczn. Nauk rol.*, (B), 77 (2) : 581-602

Wzrost szczupaka (*Esox lucius* L.) w jeziorach okolic Węgorzewa (The rate of growth of pike (*Esox lucius* L.) in Węgorzewo district lakes). *Pl Ru En*

Tentatively concludes that differences in growth rate are not dependent on quantity of food or population density.

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*Roczn. Nauk rol.*, (B), 77 (2) : 603-39  
 Wzrost okonia (*Perca fluviatilis* L.) w jeziorach okolic Węgorzewa (The growth of perch (*Perca fluviatilis* L.) in lakes of Węgorzewo district). *Pl Ru En*

General study of the rate of growth by scale reading; notes that the opercular bones are not suitable for age determinations.

- Bernatowicz, S.** (1961) F  
8-07357  
*Roczn. Nauk rol.*, (B), 77 (2) : 641-79  
 Wpływ środowiska na populację sielawy (The influence of environmental conditions on *Coregonus albula* L. population). *Pl Ru En*

Considers the influence of: surface area, type of bottom, temperature, oxygen, vegetation and planktonic Crustacea on population in eight Polish lakes.

- Zawisca, J.** (1961) F  
8-07358  
*Roczn. Nauk rol.*, (B), 77 (2) : 681-748  
 Wzrost ryb w jeziorach okolic Węgorzewa (The growth of fish in lakes of Węgorzewo district). *Pl Ru En*

Detailed studies of the age and growth of 8 species.

- Freytag, G.** (1961) F  
8-07359  
*Fischwirt.*, 11 (10) : 309-13  
 Fische und Krebse erzeugen Unterwassergerausche (Fish and crayfish produce underwater noises)

Describes acoustical phenomenon and the biological measuring.

## MISCELLANEOUS AND AUXILIARIES

- Hammond, D. A.** (1962) M  
8-07360  
 U.N., E/CONF. 39/C/108  
 Assessment of available stocks of useful species

Do 61-453me.

- Western Australia. Laws, Statutes, etc.** (1962) M  
8-07361  
*Govt Gaz. W. Aust.*, (56) : 1869-70  
 Proclamation F.D. 183/60, Ex. Co. 1412 made under the fisheries act, 1905-1961.—18 July 1962

Ci 61-02813. Prohibits the taking of fish by otter trawl nets and beam trawl nets, in the Indian Ocean waters specified, for a period of five years from 1 Aug. 1962. Repeals proclamation No. 65 of 29 Jul. 1960.



**Belgium. Laws, Statutes, etc. (1962)**

M  
8-07362

*Monit. belge*, (177) : 6215-7

Loi sur la pollution des eaux de la mer par les hydrocarbures.—4 juillet 1962 (Act on the pollution on the sea by oil.—4 July 1962)

As a result of the ratification by Belgium of the International Convention for the Prevention of the Pollution of the Sea by Oil.

**Belgium. Laws, Statutes, etc. (1962)**

M  
8-07363

*Monit. belge*, (177) : 6218-20

Loi relative au commerce des produits de l'agriculture, de l'horticulture et de la pêche maritime.—20 juillet 1962 (Act on trade in agricultural and horticultural produce and sea fisheries products.—20 July 1962)

Provisions of a general nature, mainly administrative. The National Horticulture and Agricultural Marketing Office shall also deal with sea fisheries products.

**Belgium. Laws, Statutes, etc. (1962)**

M  
8-07364

*Monit. belge*, (179) : 6353-64

Arrêté ministériel portant réglementation de la délivrance des certificats d'origine pour des produits de l'agriculture, de l'horticulture et de la pêche maritime.—26 juillet 1962 (Ministerial order regulating the issue of certificates of origin for agricultural and horticultural produce and the products of sea fisheries.—26 July 1962)

Provisions dealing mainly with the issue of certificates of origin in respect of the various products, and indicating the competent authorities in this respect.

**Belgium. Laws, Statutes, etc. (1962)**

M  
8-07365

*Monit. belge*, (190) : 6903-4

Arrêté royal fixant les titres requis du personnel enseignant des établissements d'enseignement de la pêche maritime de l'État.—26 juillet 1962 (Royal order fixing the qualifications required of teaching staffs in State establishments giving instruction in sea fishing.—26 July 1962)

**Belgium. Laws, Statutes, etc. (1962)**

M  
8-07366

*Monit. belge*, (187) : 6764

Arrêté ministériel portant fixation de la rémunération à payer pour l'obtention de licences pour la recherche et la cueillette du naissain de moules pendant la période allant du 1er octobre 1962 au 30 avril 1963, sur les ouvrages de la côte et des ports du littoral.—30 juillet 1962 (Ministerial order fixing the cost of licences for gathering mussels from coast and harbour works during the period 1 October 1962 to 30 April 1963.—30 July 1962)

10 Belgian francs per month and per barrel.

M

**Belgium. Laws, Statutes, etc. (1962)**

8-07367

*Monit. belge*, (213) : 7936-7

Arrêté ministériel modifiant l'arrêté ministériel du 26 juillet 1962 portant réglementation de la délivrance des certificats d'origine pour des produits de l'agriculture, de l'horticulture et de la pêche maritime.—7 septembre 1962 (Ministerial order amending the ministerial order of 26 July 1962 regulating the issue of certificates of origin for agricultural and horticultural produce and the products of sea fisheries.—7 September 1962)

Concerns the bodies qualified to issue such certificates.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07368

*Can. Gaz. (II)*, (7) : 337-47

SOR/62-102. Order in council, P.C. 1962-346 relating to the international Pacific halibut fishery regulations, made under the northern Pacific halibut fishery convention act.—15 March 1962

Regulations of the International Pacific Halibut Commission adopted pursuant to the convention between Canada and the United States of America of 2 Mar. 1953. All previous regulations are superseded.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07369

*Can. Gaz. (II)*, (7) : 345-56

DORS/62-102. Décret C.P. 1962-346 relatif au règlement de la Commission Internationale des Pêcheries de Flétan du Pacifique, en vertu de la loi sur la convention relative à la pêche du flétan dans le Pacifique septentrional.—15 mars 1962 (SOR/62-102. Order in council P.C. 1962-346 relating to the international Pacific halibut fishery regulations, made under the northern Pacific halibut fishery convention act.—15 March 1962)

*Fr* 8-07368.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07370

*Can. Gaz. (II)*, (7) : 365-6

SOR/62-112. Order in council P.C. 1962-395 amending the life saving equipment regulations made under the Canada shipping act.—22 March 1962

Concerns exemptions from the regulations or imposition of special requirements.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07371

*Can. Gaz. (II)*, (7) : 375-6

DORS/62-112. Décret C.P. 1962-395 modifiant le règlement sur l'équipement de sauvetage, en vertu de la loi sur la marine marchande du Canada.—22 mars 1962 (SOR/62-112. Order in council P.C. 1962-395 amending the life saving equipment regulations made under the Canada shipping act.—22 March 1962)

*Fr* 8-07370.

M  
8-07372

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (8) : 438-9  
 SOR/62-137. Order in council P.C. 1962-517 amending the lobster fishery regulations pursuant the fisheries act.—12 April 1962

Miscellaneous amendments in respect of minimum size, closed seasons and description of lobster fishing districts.

M  
8-07373

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (8) : 453-4  
 DORS/62-137. Décret C.P. 1962-517 modifiant le règlement de pêche du homard en vertu de la loi sur les pêcheries.—12 avril 1962 (SOR/62-137. Order in council P.C. 1962-517 amending the lobster fishery regulations pursuant the fisheries act.—12 April 1962)

*Fr* 8-07372.

M  
8-07374

**Canada. Laws, Statutes, etc. (1962)**  
*Statut. Can.*, (10-11), Eliz. II, Chap. 23 : 75-86  
 Appropriation act No. 4, 1962: an act for granting to Her Majesty certain sums of money for the public service for the financial year ending the 31st March 1962.—18 April 1962

Includes appropriation for fisheries, etc.

M  
8-07375

**Canada. Laws, Statutes, etc. (1962)**  
*Statut. Can.*, (10-11), Elis. II, Chap. 23 : 75-86  
 Loi des subsides n° 4 de 1962: loi accordant à Sa Majesté certaines sommes d'argent pour le service public de l'année financière expirant le 31 mars 1962.—18 avril 1962 (Appropriation act No. 4, 1962: an act for granting to Her Majesty certain sums of money for the public service for the financial year ending the 31st March 1962.—18 April 1962)

*Fr* 8-07374.

M  
8-07376

**Canada. Laws, Statutes, etc. (1962)**  
*Statut. Can.*, (10-11), Eliz. II, Chap. 24 : 87-98  
 Appropriation act No. 5, 1962: an act for granting to Her Majesty certain sums of money for the public service for the financial year ending the 31st March 1963.—18 April 1962

Includes appropriation for fisheries.

M  
8-07377

**Canada. Laws, Statutes, etc. (1962)**  
*Statut. Can.*, (10-11), Elis. II, Chap. 24 : 87-98  
 Loi des subsides n° 5 de 1962: loi accordant à Sa Majesté certaines sommes d'argent pour le service public de l'année financière expirant le 31 mars 1963.—18 avril 1962 (Appropriation act, No. 5, 1962: an act for granting to Her Majesty certain sums of money for the public service for the financial year ending the 31st March 1963.—18 April 1962)

*Fr* 8-07376.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07378

*Can. Gaz. (II)*, (10) : 532-3

SOR/62-171. Order in council, P.C. 1962-677 amending the seal protection regulations made under the fisheries act.—12 May 1962

In respect of seal fishing in the Cape Dorset and Whale Cove regions.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07379

*Can. Gaz. (II)*, (10) : 554-5

DORS/62-171. Décret C.P. 1962-677 modifiant le règlement pour la protection des phoques en vertu de la loi sur les pêcheries.—12 mai 1962 (SOR/62-171. Order in council P.C. 1962-677 amending the seal protection regulations made under the fisheries act.—12 May 1962)

Fr 8-07378.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07380

*Can. Gaz. (II)*, (10) : 534-5

SOR/62-172. Order in council P.C. 1962-678, relating to the beluga protection regulations, pursuant to the fisheries act.—12 May 1962

Detailed provisions in respect of licences, bag limits, fishing methods, etc.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07381

*Can. Gaz. (II)*, (10) : 556-7

DORS/62-172. Décret C.P. 1962-678 relatif au règlement pour la protection du bélouga en vertu de la loi sur les pêcheries.—12 mai 1962 (SOR/62-172. Order in council P.C. 1962-678, relating to beluga protection regulations, pursuant to the fisheries act.—12 May 1962)

Fr 8-07380.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07382

*Can. Gaz. (II)*, (13) : 687

SOR/62-228. Order in council P.C. 1962-877 amending the Quebec fishery regulations made under the fisheries act.—20 June 1962

The fee for a cod gill-net licence is one cent per fathom in length of net covered by the licence and such fee is payable in advance.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07383

*Can. Gaz. (II)*, (13) : 713

DORS/62-228. Décret C.P. 1962-877 modifiant le règlement de pêche du Québec en vertu de la loi sur les pêcheries.—20 juin 1962 (SOR/62-228. Order in council P.C. 1962-877 amending the Quebec fishery regulations made under the fisheries act.—20 June 1962)

Fr 8-07382.



# MISCELLANEOUS AND AUXILIARIES

M

**Canada. Laws, Statutes, etc. (1962)**

8-07384

*Can. Gaz. (II), (13) : 688*

SOR/62-229. Order in council P.C. 1962-878 amending the New Brunswick fishery regulations made under the fisheries act.—20 June 1962

In respect of mackerel and herring fishing.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07385

*Can. Gaz. (II), (13) : 714*

DORS/62-229. Décret C.P. 1962-878 modifiant le règlement de pêche du Nouveau-Brunswick en vertu de la loi sur les pêcheries.—20 juin 1962 (SOR/62-229. Order in council P.C. 1962-878 amending the New Brunswick fishery regulations made under the fisheries act.—20 June 1962)

Fr 8-07384.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07386

*Can. Gaz. (II), (16) : 853*

DOR/62-298. Shellfishing order pursuant to the New Brunswick fishery regulations made under the fisheries act.—23 July 1962

Shellfish areas along the coast and waters of Charlotte and Saint John counties are toxic to a degree that makes them unsafe for use as bait, food or for canning.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07387

*Can. Gaz. (II), (16) : 887*

DORS/62-298. Avis sur la pêche aux coquillages, en vertu du règlement de pêche du Nouveau-Brunswick selon la loi sur les pêcheries.—23 juillet 1962 (DOR/62-298. Shellfishing order pursuant to the New Brunswick fishery regulations made under the fisheries act.—23 July 1962)

Fr 8-07386.

M

**Canada. Laws, Statutes, etc. (1962)**

8-07388

*Can. Gaz. (II), (15) : 783-6*

SOR/62-271. Order in council P.C. 1962-1036 amending the fish inspection regulations made under the fish inspection act.—25 July 1962

Amendments respecting packing and labelling, and miscellaneous amendments of schedule B (standards of quality for boneless salt fish) and of schedule C (classes and grades of salted fish packed), for export out of Canada.

M  
8-07389

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (15) : 813-6

DORS/62-271. Décret C.P. 1962-1036 modifiant le règlement sur l'inspection du poisson en vertu de la loi sur l'inspection du poisson.—25 juillet 1962 (SOR/62-271. Order in council P.C. 1962-1036 amending the fish inspection regulations made under the fish inspection act.—25 July 1962)

*Fr* 8-07388.

M  
8-07390

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (15) : 787

SOR/62-272. Order in council P.C. 1962-1037 amending the lobster fishery regulations made under the fisheries act.—25 July 1962

Change of closed seasons.

M  
8-07391

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (15) : 817

DORS/62-272. Décret 1962-1037 modifiant le règlement de pêche du homard en vertu de la loi sur les pêcheries.—25 juillet 1962 (SOR/62-272. Order in council P.C. 1962-1037 amending the lobster fishery regulations made under the fisheries act.—25 July 1962)

*Fr* 8-07390.

M  
8-07392

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (16) : 848-52

SOR/62-297. Order in council P.C. 1962-1122 relating to ship construction assistance regulations made under the appropriation acts.—8 August 1962

Detailed regulations respecting capital subsidies for the construction of commercial and fishing vessels.

M  
8-07393

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (16) : 882-6

DORS/62-297. Décret C.P. 1962-1122 relatif au règlement sur l'aide à la construction de navires en vertu de la loi des subsides.—8 août 1962 (SOR/62-297. Order in council P.C. 1962-1122 relating to ship construction assistance regulations made under the appropriation acts.—8 August 1962)

*Fr* 8-07392.

M  
8-07394

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (17) : 935

SOR/62-318. Order in council P.C. 1962-1143 amending the large fishing vessel inspection regulations made under the Canada shipping act.—15 August 1962

Every wooden or steel fishing vessel over 150 tons, gross tonnage, if operating in salt water, shall be dry-docked and inspected every two years.

# MISCELLANEOUS AND AUXILIARIES

## Canada. Laws, Statutes, etc. (1962)

M

8-07395

*Can. Gaz. (II), (17) : 977*

DORS/62-318. Décret C.P. 1962-1143 modifiant le règlement sur l'inspection des grands bateaux de pêche en vertu de la loi sur la marine marchande du Canada.—15 août 1962 (SOR/62-318. Order in council P.C. 1962-1143 amending the large fishing vessel inspection regulations made under the Canada shipping act.—15 August 1962)

*Fr* 8-07394.

M

8-07396

## Canada. Laws, Statutes, etc. (1962)

*Can. Gaz. (II), (17) : 955-6*

SOR/62-330. Order in council P.C. 1962-1195 relative to tariff treatment—duties reduced on certain goods made under the customs act.—24 August 1962

Such goods include frozen tuna to be processed in Canadian canneries.

M

8-07397

## Canada. Laws, Statutes, etc. (1962)

*Can. Gaz. (II), (17) : 998-9*

DORS/62-330. Décret C.P. 1962-1195 concernant le régime tarifaire—Réduction des droits à l'égard de certaines marchandises en vertu de la loi sur les douanes.—24 août 1962 (SOR/62-330. Order in council P.C. 1962-1195 relative to tariff treatment—duties reduced on certain goods made under the customs act.—24 August 1962)

*Fr* 8-07396.

M

8-07398

## Prince Edward Island. Laws, Statutes, etc. (1961)

*Laws Pr. Edw. I., 1st and 2nd Sessions, Chapter 1 : 1-3*

The appropriation act: an act for appropriating certain monies therein mentioned for the public service for the fiscal year ending 31st March, 1962, and for the first part of the year ending 31st March, 1963.—16 March 1961

Includes appropriations for fisheries.

M

8-07399

## Chile. Laws, Statutes, etc. (1962)

*Diario of. Santiago, (25.281) : 1339*

Decreto No. 764 por el que se excluye a los productos de la pesca del régimen de estabilización de precios.—3 de mayo de 1962 (Decree No. 764 excluding fisheries products from the price stabilization regime.—3 May 1962)

As a result of propitious or unfavourable seasons, prices naturally tend to fluctuate. Fisheries products include shellfish.

**Chile. Laws, Statutes, etc. (1962)**M  
8-07400*Diario ofic., Santiago, (25.293) : 1443-4*

Decreto No. 296 por el que se autoriza la extracción y comercialización del choro en las provincias que señala, por el período que señala y deroga los decretos que indica.—26 de mayo de 1962 (Decree No. 296 authorizing the capture and marketing of *Choromytilus chorus* in the provinces named and for the period specified and rescinding the decrees as stated.—26 May 1962)

Valid from 1 Jun. to 31 Jul. 1962 in all the southern provinces of Chile.

**Chile. Laws, Statutes, etc. (1962)**M  
8-07401*Diario ofic., Santiago, (25.293) : 1444*

Decreto No. 353 por el que se suspende la prohibición de extraer ostiones en las costas de Iquique y Pisagua por el tiempo que se señala.—30 de junio de 1962 (Decree No. 353 suspending the prohibition to catch *Pecten purpuratus* on the coast off Iquique and Pisagua for the time specified.—30 June 1962)

Valid until 30 Sep. 1962.

**Chile. Laws, Statutes, etc. (1962)**M  
8-07402*Diario ofic., Santiago, (25.293) : 1444*

Decreto No. 368 por el que se reemplaza los números 1.o y 2.o del decreto supremo número 296, de 1962.—10 de julio de 1962 (Decree No. 368 replacing articles 1 and 2 of supreme decree No. 296 of 1962.—10 July 1962)

Extends authorization for the fishing of *Choromytilus chorus* from 31 Jul. to 15 Sep. 1962.

**Cuba. Laws, Statutes, etc. (1962)**M  
8-07403*Gaceta ofic. Cuba, (60) : 3701*

Resolución comunicando que el camarón de mar no será objeto de veda.—9 de marzo de 1962 (Resolution announcing that there is to be no closed season on sea shrimp.—9 March 1962)

Applicable to the present year only; not to be taken as creating a precedent.

**Cuba. Laws, Statutes, etc. (1962)**M  
8-07404*Gaceta ofic. Cuba, (60) : 3701-2*

Resolución estableciendo períodos de veda (Resolution establishing a closed season.—Undated)

On rock lobster (*Panulirus argus*), from 26 Mar. to 26 Jun. 1962.

**Cuba. Laws, Statutes, etc. (1962)**M  
8-07405*Gaceta ofic. Cuba, (91) : 5720*

Resolución estableciendo periodo de veda de esponjas.—3 de mayo de 1962 (Resolution establishing a closed season on sponges.—3 May 1962)

From 20 May to 30 Sep. 1962.



# MISCELLANEOUS AND AUXILIARIES

M  
8-07406

**Cuba. Laws, Statutes, etc. (1962)**  
*Gaceta ofic. Cuba*, (127) : 8489

Resolución por la que se establece un período de veda de la especie *Macrobrachium jamaicense*.—20 de junio de 1962 (Resolution establishing a closed season on the species *Macrobrachium jamaicense*.—20 June 1962)

From 10 Jul. to 10 Sep. 1962.

M  
8-07407

**Cuba. Laws, Statutes, etc. (1962)**  
*Gaceta ofic. Cuba*, (127) : 8489-90

Resolución por la que se establece un período de veda para las especie *Caretta caretta*, *Eretmochelys imbricata* y *Chelonia mydas*.—20 de junio de 1962 (Resolution establishing a closed season on the species *Caretta caretta*, *Eretmochelys imbricata* and *Chelonia mydas*.—20 June 1962)

From 5 Jul. to 5 Oct. 1962.

M  
8-07408

**Gabon. Laws, Statutes, etc. (1962)**  
*J. off. Rép. gabon.*, (17) : 594-6

Arrêté n° 653/PR-MA du 22 mai 1962 fixant le prix suivant le qualité du poisson et de certains produits marins sur les marchés de Libreville (Order No. 653/PR-MA fixing, according to quality, the price of fish and certain other sea products on the Libreville market.—22 May 1962)

Defines in detail the meaning of the terms fish and Crustacea 1st, 2nd and 3rd quality.

M  
8-07409

**Greece. Laws, Statutes, etc. (1962)**  
*Ephēm. Kybern.*, (II), (43) : 441-2

B. Diatagma up'arith. 166 perī kanonismou alieías dia tratōn (Royal decree No. 166, regulating fishing with so-called 'trata' nets.—6 March 1962)

M  
8-07410

**Italy. Laws, Statutes, etc. (1962)**  
*Gazz. uff. Repub. ital.*, (160), Suppl. 1 : 64-6

Decreto del presidente della repubblica n. 531 relativo alle sospensioni e riduzioni daziarie, per l'anno 1962, per alcuni prodotti.—5 giugno 1962 (Presidential decree No. 531 concerning customs suspensions and reductions for certain products for 1962.—5 June 1962)

*Inter alia*, customs on whale oil suspended.

M  
8-07411

**Italy. Laws, Statutes, etc. (1962)**  
*Gazz. uff. Repub. ital.*, (160), Suppl. 1 : 67-70

Decreto del presidente della repubblica n. 532: modificazioni al regime dazionario di alcuni prodotti.—5 giugno 1962 (Presidential decree No. 532 amending the customs system affecting certain products.—5 June 1962)

Affects *inter alia* anchovies and sardines in brine.

**Libya. Laws, Statutes, etc. (1962)**M  
8-07412*Off. Gaz., Libya*, (6)

Law No. 8 of 1962 regulating fishing.—26 April 1962

Extensive provisions respecting the establishment of a Federal Fisheries Department and its functions, the establishment of maritime fishing offices at Bengasi and Tripoli, fishing licences, fishing vessels and their inspections, fishing methods, fishermen including their social insurance, etc.

**Morocco. Laws, Statutes, etc. (1962)**M  
8-07413*Bull. off. Emp. chérif.*, (2582) : 573, 591-2

Arrêté du ministre du commerce, de l'industrie, des mines, de l'artisanat et de la marine marchande n° 230-62 du 12 avril 1962 fixant le prix de la sardine destinée à l'industrie de la conserve, à la congélation à la salaison, aux sous-produits et à l'exportation (Order No. 230-62 fixing the prices of sardines intended for the canning industry, freezing, salting, by products and export.—12 April 1962)

**Morocco. Laws, Statutes, etc. (1962)**M  
8-07414*Bull. off. Emp. chérif.*, (2594) : 881, 901

Arrêté n° 376-62 du 28 mai fixant, pour la campagne 1962-1963, les conditions d'application du dahir du 8 janvier 1957, conférant la garantie partielle de l'état aux avances bancaires consenties sur les conserves de sardines (Order No. 376-62 fixing for the 1962-63 season the conditions for application of the dahir of 8 January 1957 granting a partial state guarantee for bank loans on sardine preserves.—28 May 1962)

Fixes maximum amount of loans that can be guaranteed.

**Morocco. Laws, Statutes, etc. (1962)**M  
8-07415*Bull. off. Emp. chérif.*, (2594) : 878-9, 898

Dahir n° 1-59-064 du 30 juin 1962 modifiant l'article 2 de l'annexe III du dahir du 31 mars 1919 relatif à l'étendue des eaux territoriales marocaines au point de vue de la pêche et abrogeant l'article premier du dahir du 25 mars 1922 portant règlement sur l'exercice de la pêche en flotte (Dahir No. 1-59-064, amending art. 2 of annex III to the dahir of 31 March 1919 relating to the extent of Moroccan territorial waters in respect of fishing, and abrogating art. 1 of the dahir of 25 March 1922 regulating the exercise of fleet fishing.—30 June 1962)

Establishes the width of the territorial sea, in respect of fisheries, at 12 miles on the Atlantic and Mediterranean coasts and at 6 miles in the strait of Gibraltar.

**Morocco. Laws, Statutes, etc. (1962)** M  
8-07416  
*Bull. off. Emp. chérif.*, (2594) : 882, 901

Arrêté n° 387-62 du 30 juin 1962 complétant l'arrêté n° 230-62 du 12 avril 1962 fixant le prix de la sardine destinée à l'industrie de la conserve, à la congélation, à la salaison, aux sous-produits et à l'exportation (Order No. 387-62 supplementing order No. 230-62 of 12 April 1962 fixing the price of sardines of the canning industry, freezing, salting, by-products and export.—30 June 1962)

In respect of Al Hoceima Harbour.

**Netherlands. Laws, Statutes, etc. (1962)** M  
8-07417  
*Staatsblad, Den Haag*, Text 167 : 400-1

Wet van 3 mei 1962, houdende wijziging van de Zuiderzeesteunwet (Act amending the act on assistance relative to the Zuiderzee.—3 May 1962)

Amends act Stbl. 290/1925 in respect of subsidies to elderly persons who practised fishing in the IJsselmeer before its transformation.

**Netherlands. Laws, Statutes, etc. (1962)** M  
8-07418  
*Ned. Staatscourant*, (92) : 3

Nr. Vi. 495. Ontheffing van enige bepalingen van het bijzonder visserij-reglement VII voor de visserij in de Geul.—10 mei 1962 (Order No. Vi. 495 exempting fishing in the river Geul from the application of certain provisions of the special regulations VII on fishing.—10 May 1962)

Authorized fishing with hooks, etc., in a certain part of the river Geul during the period 1 Oct. 1962-15 Mar. 1963.

**Netherlands. Laws, Statutes, etc. (1962)** M  
8-07419  
*Ned. Staatscourant*, (107) : 6

Nr. J 1150. Maaswijde zeevisnetten 1962.—1 juni 1962 (Order No. J 1150 relative to the dimension of meshes of sea-fishing nets.—1 June 1962)

In respect of drag-nets.

**Netherlands. Laws, Statutes, etc. (1962)** M  
8-07420  
*Staatsblad, Den Haag*, Text 228 : 567

Besluit van 6 juni 1962, houdende nadere wijziging van het bijzonder visserijreglement voor de afgesloten Zuiderzee (Decree further amending the special regulations on fishing in the landbound Zuiderzee.—6 June 1962)

Amends special regulations, Stbl. 315/1932, as last amended in Stbl. 380/1959. Concerns net sizes and the prohibition to use certain nets during specified periods.

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- M  
8-07421
- New Zealand. Laws, Statutes, etc. (1961)**  
*Statut. Rules*, 1961/123 : 8 p.  
 The whaling industry regulations 1961.—20 September 1961
- Detailed regulations replacing the whaling industry regulations 1949. Concern licensing, minimum sizes, open season, marking of whales, delivery of whales to factory for processing, etc.
- M  
8-07422
- Norway. Laws, Statutes, etc. (1962)**  
*Norsk Lovtid.*, (6) : 84  
 Resolusjon om sentralisering av eksporten av saltet zvintersild til Sverige.—9. februar 1962 (Order in council concerning the centralization of exports of salt winter herring to Sweden.—9 February 1962)
- M  
8-07423
- Norway. Laws, Statutes, etc. (1962)**  
*Norsk Lovtid.*, (6) : 95  
 Skriv om setting av vintersildoppsynet 1962.—12. februar 1962 (Circular concerning organization of control of winter herring fishing in 1962.—12 February 1962)
- M  
8-07424
- Pakistan. Laws, Statutes, etc. (1962)**  
*Gaz. Pakist.*, Extr.: 8610–861x  
 Ordinance No. 38 of 1962. Provincial industrial development corporation (West Pakistan) ordinance, 1962: an ordinance to establish an industrial development corporation for West Pakistan.—1 June 1962
- Is responsible for planning, promoting, organizing and implementing programmes for the establishment of industries listed in the schedule, comprising exploitation of marine fisheries except fisheries outside territorial waters.
- M  
8-07425
- Pakistan. Laws, Statutes, etc. (1962)**  
*Gaz. Pakist.*, Extr. : 1070f–1070l  
 S.R.O. 27 (R)/62. Customs notification in supersession of notifications Nos. 41—Customs, of 19 November 1951, and S.R.O. 468 (K)/61, of 18 April 1961.—12 June 1962
- Partial exemption from customs duties on various articles, including fish and whale oil.
- M  
8-07426
- Poland. Laws, Statutes, etc. (1961)**  
*Dziennik Ustaw*, (31), Text 143 : 253  
 Międzynarodowa konwencja o rybolówstwie na Północno-zachodnim atlantyku sporządzona w Waszyngtonie dnia 8 lutego 1949 r.—19 lipca 1961 r. (Ratification of the international convention for the northwest Atlantic fisheries, signed in Washington on February 8, 1949.—19 July 1961)



**Poland. Laws, Statutes, etc. (1962)**  
*Dziennik Ustaw*, (22), Text 99 : 162-3

M  
 8-07427

Rozporządzenie ministra finansów z dnia 16 marca 1962 r. w sprawie zmiany rozporządzenia z dnia 13 czerwca 1949 r. o poborze podatku dochodowego w formie ryczałtu od rybaków morskich (Order amending the order of 13 June 1949 relating to the collection in a lump sum of the income tax payable by sea fishermen.—16 March 1962)

Amends order Dz.U. texts 1949/280 and 1954/286.

**Portugal. Laws, Statutes, etc. (1961)**  
*Diário do Gov., Lisboa*, 1 (15) : 50

M  
 8-07428

Decreto n.º 43 475: dá nova redacção ao corpo de artigo 3.º do decreto n.º 38 806, alterado pelo artigo único do decreto n.º 40 136 (comissão consultiva nacional das pescarias do noroeste do Atlântico).—18 de janeiro de 1961 (Decree No. 43 475 redrafting article 3 of decree No. 38 806 as amended by the sole article of decree No. 40 136 (national fishery advisory commission for the northeast Atlantic).—18 January 1961)

Provides for the membership of the commission.

**Portugal. Laws, Statutes, etc. (1961)**  
*Diário do Gov., Lisboa*, 1 (24) : 95-6

M  
 8-07429

Decreto n.º 43 489 : autoriza a direcção geral da fazenda pública a emitir, pelo fundo de renovação e de apetrechamento da indústria da pesca, a obrigação geral representativa da 4.ª série do empréstimo de renovação e de apetrechamento da indústria da pesca.—II plano de fomento, na importância de 74 000 000\$.—28 de janeiro de 1961 (Decree No. 43 489 authorizing the general directorate of public finance to issue on behalf of the fishing industry renewal and supply fund the bonds representing the 4th series of the fishing industry renewal and supply fund loans as part of the 2nd development plan, for the amount of 74 million escudos.—28 January 1961)

**Portugal. Laws, Statutes, etc. (1961)**  
*Diário do Gov., Lisboa*, 1 (25) : 98

M  
 8-07430

Decreto n.º 43 491: dá nova redacção aos corpos dos artigos 5.º e 11.º e ao artigo 13.º do decreto n.º 29 755, que cria o grémio dos armadores de pesca de arrasto (Decree No. 43 491 redrafting the texts of articles 5 and 11 and article 13 of decree No. 29 755 which established the trawling vessel owners' syndicate).—30 January 1961)

Changes in managerial organization in view of expansion of trawl fishing in the past ten years.

**Portugal. Laws, Statutes, etc. (1961)**  
*Diário do Gov., Lisboa*, 1 (36) : 146

M  
 8-07431

[For correction see: D.G. No. 63, 17 March 1961]

Decreto n.º 43 504: dá nova redacção ao artigo 3.º do decreto n.º 9902 (regras a adoptar no serviço das arqueações).—11 de fevereiro de 1961 (Decree No. 43 504 redrafting article 3 of decree No. 9902 (rules to be adopted in the dimensions service).—11 February 1961)

Deals with the dimensions, size and tonnage of fishing vessels.

M

**Portugal. Laws, Statutes, etc. (1961)**

8-07432

*Diário do Gov., Lisboa*, 1 (39) : 151-5

Decreto n.º 43 507: promulga o estatuto orgânico do Instituto de Biologia Marítima—revoga o decreto n.º 40 190.—15 de fevereiro de 1961 (Decree No. 43 507 promulgating the statute establishing the Marine Biology Institute and repealing decree No. 40 190.—15 February 1961)

Extensive provisions, repealing and replacing decree No. 40 190 of 17 June 1955. Purpose and functions of the institute are prescribed, and its organization and management are described.

M

**Portugal. Laws, Statutes, etc. (1961)**

8-07433

*Diário do Gov., Lisboa*, 1 (108) : 546-7

Portaria n.º 18 467: estabelece um regime experimental para a pesca dos crustáceos com artes de arrastar pelo fundo.—9 de maio de 1961 (Order No. 18 467 establishing an experimental system for fishing crustaceans with deep-water drag nets.—9 May 1961)

M

**Portugal. Laws, Statutes, etc. (1961)**

8-07434

*Diário do Gov., Lisboa*, 1 (182) : 984

Declaração: mantém para a campanha de 1961-1962 os preços e características do bacalhau salgado seco nacional e de procedência estrangeira, constantes da declaração inserta no *Diário do Governo* n.º 263, de 12 de novembro de 1960.—1 de agosto de 1961 (Declaration maintaining for the 1961-1962 season the prices and characteristics required of Portuguese and foreign dried salted cod as set forth in the declaration appearing in *Diário do Governo* No. 263 of 12 November 1960.—1 August 1961)

M

**Spain. Laws, Statutes, etc. (1962)**

8-07435

*Bol. ofic. Estado, Madr.*, (170) : 9915-6

[For correction see: *B.O.E.* No. 183, 1 August 1962, p. 10784]

Orden por la que se aprueba el cuadro general de vedas y dimensiones mínimas para la captura, circulación y venta en todo el territorio nacional de crustáceos y moluscos, así como las denominaciones de las concesiones de la zona marítimo-terrestre para su aprovechamiento pesquero.—27 de junio de 1962 (Order approving the general rules governing prohibition and minimum dimensions for the capture, transport and sale throughout the territory of the country of crustaceans and molluscs and also approving the denomination of the concessions in the coastal area where they may be fished.—27 June 1962)

Consolidates provisions governing this subject. The minimum size and close season are extended in respect of *Pecten maximus* and *Chlamys opercularie*.

**Spain. Laws, Statutes, etc. (1962)** M  
8-07436  
*Bol. ofic. Estado, Madr.*, (189) : 11142-4

Resolución por la que se aprueba el reglamento orgánico provisional de la junta de enseñanzas náuticas y de formación profesional náutico-pesquera.—5 de julio de 1962 (Resolution approving the provisional organic regulations of the nautical and vocational fisheries training board.—5 July 1962)

Detailed provisions respecting composition, functions and administration of the board.

**Spain. Laws, Statutes, etc. (1962)** M  
8-07437  
*Bol. ofic. Estado, Madr.*, (215) : 12692

Orden por la que se establece la obligatoriedad de realizar pruebas de estabilidad en todos los buques y embarcaciones nacionales.—3 de septiembre de 1962 (Order making it compulsory to carry out tests on all Spanish ships and vessels.—3 September 1962)

Within a one-year period.

**Sweden. Laws, Statutes, etc. (1962)** M  
8-07438  
*Svensk FörfSaml.*, (100) : 249-51

Kungl. Maj:ts Kungörelse Nr 100 om fiskredskapslån—6 april 1962 (Royal order No. 100, concerning fishing equipment loans.—6 April 1962)

Repeals and replaces orders Nos. 678 of 15 Oct. 1948 and 937 of 31 Dec. 1943.

**Syrian Arab Republic. Laws, Statutes, etc. (1962)** M  
8-07439  
*Rec. Lois Répub. arabe syr.*, (7) : 74-5

Arrêté N° 397 du 14 juillet 1962 ajoutant certains produits et marchandises au tableau annexé à l'arrêté N° 511 du 18 août 1959 exemptant certains produits et marchandises du droit d'importation (Order No. 397 adding certain products and goods to the schedule to order No. 511 of 18 August 1959 exempting certain products and goods from import duties.—14 July 1962)

Such products and goods include fish oil.

**Syrian Arab Republic. Laws, Statutes, etc. (1962)** M  
8-07440  
*Rec. Lois Répub. arabe syr.*, (8) : 41-2

Arrêté N° 458 du 5 août 1962 autorisant l'exportation de certains produits sans licences (Order No. 458 authorizing the export of certain products without licences.—5 August 1962)

Such products include preserved sardines.

M

**U.K. Laws, Statutes, etc. (1962)**

8-07441

*Statut. Instrum. U.K.*, (1394) : 4 p.

The salmon and migratory trout (drift-net fishing) restrictions on landing order 1962.—5 July 1962

Landings may be lawfully effected if the catching of the fish off the coasts of England and Wales has been authorized by a licence. Order valid until 15 Feb. 1965.

M

**U.K. Laws, Statutes, etc. (1962)**

8-07442

*Statut. Instrum. U.K.*, (1520) : 2 p.

The white fish and herring subsidies (aggregate amount of grants) order 1962.—4 July 1962

Amount increased to £30,250,000.

M

**U.K. Laws, Statutes, etc. (1962)**

8-07443

*Statut. Instrum. U.K.*, (1586) : 5 p.

The white fish industry (grants for fishing vessels and engines) scheme 1962.—4 July 1962

Revokes and replaces the scheme of 1955 and amending schemes. The principal changes relate to the amount of grants which may be paid; the reduction, to ten years in the case of vessels and five years in the case of engines, of the period during which grants might become repayable; the removal of the restrictions on voyages to distant waters by grant-assisted vessels; and the removal of the condition that applications shall be entertained only in respect of vessels and engines built or to be built in the United Kingdom.

M

**U.K. Laws, Statutes, etc. (1962)**

8-07444

*Statut. Instrum. U.K.*, (1587) : 8 p.

The white fish subsidy (United Kingdom) scheme 1962.—4 July 1962

This scheme succeeds the scheme of 1961 as amended. It provides for payment of grants from 1 Aug. 1962 to 31 Jul. 1963. These grants are payable on landings of fish by vessels under 60 feet in length and for voyages by fishing vessels of 60 feet in length and over.

M

**U.K. Laws, Statutes, etc. (1962)**

8-07445

*Seychelles Govt Gaz.*, (42), Suppl. p. 44

S.I. No. 29 of 1962: the female turtles protection regulations, 1962, made under the turtles ordinance (chapter 22).—19 July 1962

Catching, killing, harpooning and other taking possession of female turtles unlawful in certain places during the whole or part of the year.



# MISCELLANEOUS AND AUXILIARIES

## U.S. Laws, Statutes, etc. (1960)

M

8-07446

*Treat. int. Acts Ser. U.S.A.*, (5014) : 4 p.

Amendments to the schedule to the international whaling convention (signed at Washington on December 2, 1946), adopted at the twelfth meeting of the International Whaling Commission.—24 June 1960

Concerns in particular the use of whale catchers attached to a factory ship in defined areas.

## U.S. Laws, Statutes, etc. (1961)

M

8-07447

*Treat. int. Acts Ser. U.S.A.*, (5015) : 2 p.

Amendments to the schedule to the international whaling convention (signed at Washington on December 2, 1946), adopted at the thirteenth meeting of the International Whaling Commission.—23 June 1961

Concerns the taking of humpback whales in Greenland waters, change of closed season, and treating of whales without use of land station.

## U.S. Laws, Statutes, etc. (1962)

M

8-07448

*Treat. int. Acts Ser. U.S.A.*, (4992) : 4 p.

Amendment to the annex to the international convention for the high seas fisheries of the North Pacific Ocean.—11 November 1961

The annex to the convention of 9 May 1952 between USA, Canada and Japan is amended with respect to the removal from the annex of herring off the coast of the USA south of the entrance to the strait of Juan de Fuca.

## U.S. Laws, Statutes, etc. (1962)

M

8-07449

*Fed. Reg. U.S.*, (83) : 4063

CFR title 21—chapter 1—part 37: Fish, definitions and standards of identity; standards of fill of container. Fish flour, identity; stay of order and notice of public hearing.—25 April 1962

Suspends order published in the Federal Register of 25 Jan. 1962 (27 FR 740).

## U.S. Laws, Statutes, etc. (1962)

M

8-07450

*Fed. Reg. U.S.*, (110) : 5400

CFR title 50—chapter 1—part 33: Sport fishing. Bering Sea national wildlife refuge, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

- U.S. Laws, Statutes, etc.** (1962) M  
8-07451  
*Publ. Laws U.S.A.*, (87-580), 87th Congress, H.R. (7336) : 1 p.

An act to promote the production of oysters by propagation of disease-resistant strains, and for other purposes.—9 August 1962

The Secretary of the Interior is authorized to acquire and transfer to states oyster brood stock that he believes possesses resistance to the causative agent of excessive mortality. He may also make grants to states for research, etc.

- Southward, G. M.** (1962) M  
8-07452  
*J. Fish. Res. Bd Can.*, 19 (2) : 335-8

Photographing halibut otoliths for measuring growth zones

Apparatus is described for clearing, projecting and photographing halibut otoliths for use in growth studies.

- U.S. Laws, Statutes, etc.** (1962) MG  
8-07453  
*Fed. Reg. U.S.*, (157) : 8076

CFR title 50—chapter 1—part 33: Sport fishing. Loxahatchee national wildlife refuge, Florida.—13 August 1962

In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

- Carrick, R.** (1960) MG  
8-07454  
*S.C.A.R. Bull.*, (6) : 66-75

Conservation of nature in the Antarctic

General review, with special references to seals and whales.

- NAS/NRC/(US)** (1961)\* MF  
8-07455  
*Publ. nat. Acad. Sci., Wash.*, (839) : 2 pts  
Science in Antarctica

- Zane, El. & V. Gomboşiu** (1962) MF  
8-07456  
*Bull. Inst. Cerc. pisc.*, 21 (2) : 74-96

Lucrările nepublicate efectuate de Institutul de cercetări şi proiectări piscicole în perioada 1950-1961 (Works not yet published of the Institute for Research and Planning Fisheries for the period 1950-1961). *Ro*

Lists 350 such studies by author, title and subject.

- New South Wales. Laws, Statutes, etc.** (1962) MF  
8-07457  
*Govt Gaz. N.S.W.*, (56) : 1688

Proclamation, made under the fisheries and oyster farms act, 1935, as amended relating to the territorial tidal waters of New South Wales.—23 May 1962

Prohibits, in the specified tidal waters, the taking of fish by any line to which more than six fishing-hooks are attached, except for small-sized hooks, from 1 Jun. 1962 to 31 May 1967.

MF  
8-07458

**New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (66) : 2021

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Sponsor's Lagoon, Tweed River, County of Rous.—13 June 1962

Prohibits in the specified tidal waters the taking of fish by nets of every description other than the prescribed dip or scoop net for the capture of prawns only, from 1 Jul. 1962 to 30 Jun. 1967.

MF  
8-07459

**New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (66) : 2020

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the whole of the waters of Myall Lakes, including Booloombayt Lake and the Broad-Water.—20 June 1962

Prohibits in the specified tidal waters the taking of fish by nets of every description other than hauling nets not exceeding 20 feet in length and the prescribed dip or scoop net, from 18 Jul. 1962 to 17 Jul. 1967.

MF  
8-07460

**New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (66) : 2020

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of the waters of Clyde River, County of St. Vincent.—20 June 1962

Prohibits in the specified tidal waters the taking of fish by all methods other than a single rod and line or handline with not more than two hooks attached, from 1 Aug. 1962 to 31 Jul. 1967.

MF  
8-07461

**New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (66) : 2019

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of the waters of Myall River, Corrie Creek and Paddy Marr's Bar, County of Gloucester.—27 June 1962

Prohibits in the specified tidal waters the taking of fish by spears, spearguns and similar devices from 1 Jul. 1962 to 30 Jun. 1967.

MF  
8-07462

**New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (66) : 2036

Amendment of regulations made under the fisheries and oyster farms act, 1935-1960.—13 July 1962

Minor amendment.

- MF  
8-07463
- New South Wales. Laws, Statutes, etc.** (1962)  
*Govt Gaz. N.S.W.*, (70) : 2170  
Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to Lord Howe Island.—4 July 1962
- Prohibits in the specified tidal waters, from 1 Sep. 1962 to 31 Aug. 1967, the taking of (a) all species of fish by fishing nets of every description and by the use of spears, spearguns and similar devices; (b) of butterfly cod and double-headers by the use of spears, spearguns and similar devices.
- MF  
8-07464
- Tasmania. Laws, Statutes, etc.** (1961)  
*Statut. Rules Aust.*, (93) : 2 p.  
Sea fisheries amendment regulations (No. 2) 1961, made under the fisheries act 1959.—4 July 1961
- Various amendments in respect of scallop fishing and the taking of crayfish, penalties, etc.
- MF  
8-07465
- Western Australia. Laws, Statutes, etc.** (1962)  
*Govt Gaz. W. Aust.*, (45) : 1491  
Notification F.D. 167/53 made under the fisheries act, 1905-1961.—1 June 1962
- Ci 62-00465. Imposes certain conditions in respect of fishing licences. Repeals notice published in *G.G.* No. 63 of 22 Jul. 1960.
- MF  
8-07466
- Western Australia. Laws, Statutes, etc.** (1962)  
*Govt Gaz. W. Aust.*, (56) : 1870  
Proclamation F.D. 87/39, Ex. Co. No. 1415 made under the fisheries act, 1905-1961.—18 July 1962
- Prohibits the taking of fish by nets, in the waters of Peel and Harvey Estuary, each week-end, from 1 Aug. 1962 to 31 Jul. 1967.
- MF  
8-07467
- Belgium. Laws, Statutes, etc.** (1962)  
*Monit. belge*, (179) : 6312-3  
Arrêté ministériel relatif aux licences d'importation et d'exportation pour certains produits agricoles et alimentaires.—26 juillet 1962 (Ministerial order relative to import and export licences for certain agricultural and food products.—26 July 1962)
- Applies also to fishing bait in small packets containing cereals other than rice and/or cereal by-products.
- MF  
8-07468
- Canada. Laws, Statutes, etc.** (1962)  
*Can. Gaz. (II)*, (10-11) Eliz. II, Chap. 16 : 57  
An act to amend the fisheries improvement loans act.—23 March 1962
- The minister is not liable under this act to make a payment to a lender in respect of a guaranteed loan made after the 30th day of June 1965.



MF  
8-07469

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (10-11) Elis. II, Chap. 16 : 57  
 Loi modifiant la loi sur les prêts aidant aux opérations de pêche.—23 mars 1962 (An act to amend the fisheries improvement loans act.—23 March 1962)

*Fr* 8-07468.

MF  
8-07470

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (7) : 408-10  
 SOR/62-122. Order in council P.C. 1962-430 amending the Saskatchewan fishery regulations made under the fisheries act.—29 March 1962

Miscellaneous amendments in respect of angling, bag limits, use of nets, commercial fishing, etc.

MF  
8-07471

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (7) : 418-21

DORS/62-122. Décret C.P. 1962-430, modifiant le règlement de pêche de la Saskatchewan en vertu de la loi sur les pêcheries.—29 mars 1962 (SOR/62-122. Order in council P.C. 1962-430 amending the Saskatchewan fishery regulations made under the fisheries act.—29 March 1962)

*Fr* 8-07470.

MF  
8-07472

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (8) : 426-9  
 SOR/62-131. Order in council P.C. 1962-468, relating to Fraser River sockeye and pink salmon fishery regulations, 1962, pursuant to the fisheries act.—5 April 1962

New regulations applicable to the year 1962.

MF  
8-07473

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (8) : 441-4

DORS/62-131. Décret C.P. 1962-468 relatif au règlement de 1962 sur la pêche des saumons sockeye et rose du Fraser en vertu de la loi sur le pêcheries.—5 avril 1962 (SOR/62-131. Order in council P.C. 1962-468, relating to Fraser River sockeye and pink salmon fishery regulations, 1962, pursuant to the fisheries act.—5 April 1962)

*Fr* 8-07472.

MF  
8-07474

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (8) : 440

SOR/62-138. Order in council P.C. 1962-518 amending the Nova Scotia fishery regulations made under the fisheries act.—12 April 1962

Amendments respecting salmon fishing.

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07475  
*Can. Gaz. (II), (8) : 455*

DORS/62-138. Décret C.P. 1962-518 modifiant le règlement de pêche de la Nouvelle-Écosse en vertu de la loi sur les pêcheries.—12 avril 1962 (SOR/62-138. Order in council P.C. 1962-518 amending the Nova Scotia fishery regulations made under the fisheries act.—12 April 1962)

*Fr 8-07474.*

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07476  
*Can. Gaz. (II), (8) : 441-4*

SOR/62-139. Order in council P.C. 1962-519 amending the British Columbia fishery regulations made under the fisheries act.—12 April 1962

Numerous amendments in respect of bag limits, closed seasons, etc.

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07477  
*Can. Gaz. (II), (8) : 456-9*

DORS/62-139. Décret C.P. 1962-519 modifiant le règlement de pêche de la Colombie-Britannique en vertu de la loi sur les pêcheries.—12 avril 1962 (SOR/62-139. Order in council P.C. 1962-519 amending the British Columbia fishery regulations made under the fisheries act.—12 April 1962)

*Fr 8-07476.*

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07478  
*Statut. Can., (10-11), Eliz. II, Chap. 29 : 123-9*

An act to amend the veterans' land act.—18 April 1962

*Inter alia* new section 65 on assistance loans to part-time farmers and commercial fishermen.

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07479  
*Statut. Can., (10-11), Elis. II, Chap. 29 : 125-31*

Loi modifiant la loi sur les terres destinées aux anciens combattants.—18 avril 1962 (An act to amend the veterans' land act.—18 April 1962)

*Fr 8-07478.*

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07480  
*Can. Gaz. (II), (10) : 536*

SOR/62-173. Order in council P.C. 1962-680 amending the fish inspection regulations pursuant to the fish inspection act.—12 May 1962

Concerns packing of 'spring mackerel', pickled salmon, trout and char.

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07481  
*Can. Gaz. (II)*, (10) : 558

DORS/62-173. Décret C.P. 1962-680 modifiant le règlement sur l'inspection du poisson en vertu de la loi sur l'inspection du poisson.—12 mai 1962 (SOR/62-173. Order in council P.C. 1962-680 amending the fish inspection regulations pursuant to the fish inspection act.—12 May 1962)

*Fr* 8-07480.

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07482  
*Can. Gaz. (II)*, (12) : 643-7

SOR/62-213. Order in council 1962-824 amending the Newfoundland fishery regulations made under the fisheries act.—12 June 1962

In respect of fishing for salmon and cod with traps and nets, commercial salmon and cod fishing licences, etc.

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07483  
*Can. Gaz. (II)*, (12) : 669-73

DORS/62-213. Décret C.P. 1962-824 modifiant le règlement de pêche de Terre-Neuve, en vertu de la loi sur les pêcheries.—12 juin 1962 (SOR/62-213. Order in council 1962-824 amending the Newfoundland fishery regulations made under the fisheries act.—12 June 1962)

*Fr* 8-07482.

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07484  
*Can. Gaz. (II)*, (13) : 686

SOR/62-227. Order in council 1962-876 amending the British Columbia fishery regulations made under the fisheries act.—20 June 1962.

During the year 1962 no person shall fish for or catch salmon with gill-net or drift-net gear the web or any portion of the web of which contains monofilament in single or multiple strands.

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07485  
*Can. Gaz. (II)*, (13) : 712

DORS/62-227. Décret C.P. 1962-876 modifiant le règlement de pêche de la Colombie-Britannique en vertu de la loi sur les pêcheries.—20 juin 1962 (SOR/62-227. Order in council 1962-876 amending the British Columbia fishery regulations made under the fisheries act.—20 June 1962)

*Fr* 8-07484.

**Canada. Laws, Statutes, etc. (1962)** MF  
8-07486  
*Can. Gaz. (II)*, (15) : 765-71

SOR/62-263. Order in council P.C. 1962-1003 amending the Quebec fishery regulations made under the fisheries act.—18 July 1962

Numerous amendments in respect of licences, bag limits, closed seasons, etc.

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## Canada. Laws, Statutes, etc. (1962)

MF  
8-07487

*Can. Gaz. (II)*, (15) : 795-801

DORS/62-263. Décret C.P. 1962-1003 modifiant le règlement de pêche du Québec en vertu de la loi sur les pêcheries.—18 juillet 1962 (SOR/62-263. Order in council P.C. 1962-1003 amending the Quebec fishery regulations made under the fisheries act.—18 July 1962)

Fr 8-07486.

## FAO. Fisheries Division, Technology Branch (1963)

MF  
8-07488

Rome, 185 p.

List of films and filmstrips on fisheries and related subjects

Lists 638 films and 58 filmstrips with technical data and content summary. Gives addresses of distributors and incl. a subject index. About half of the listed titles deal with marine biology and fishery. NE 61-04814.

## Canada. Laws, Statutes, etc. (1962)

MF  
8-07489

*Can. Gaz. (II)*, (16) : 836

SOR/62-294. Order in council P.C. 1962-1113, amending the British Columbia fishery regulations made under the fisheries act.—8 August 1962

Concerns fishing for salmon in prescribed areas.

## Canada. Laws, Statutes, etc. (1962)

MF  
8-07490

*Can. Gaz. (II)*, (16) : 868

DORS/62-294. Décret C.P. 1962-1113 modifiant le règlement de pêche de la Colombie-Britannique en vertu de la loi sur les pêcheries.—8 août 1962 (SOR/62-294. Order in council P.C. 1962-1113, amending the British Columbia fishery regulations made under the fisheries act.—8 August 1962)

Fr 8-07489.

## Canada. Laws, Statutes, etc. (1962)

MF  
8-07491

*Can. Gaz. (II)*, (17) : 944

SOR/62-324. Order in council P.C. 1962-1168 amending the New Brunswick fishery regulations made under the fisheries act.—22 August 1962.

Angling for salmon is permitted in the prescribed rivers until the fifteenth day of October.

## Canada. Laws, Statutes, etc. (1962)

MF  
8-07492

*Can. Gaz. (II)*, (17) : 987

DORS/62-324. Décret C.P. 1962-1168 modifiant le règlement de pêche du Nouveau-Brunswick en vertu de la loi sur les pêcheries.—22 août 1962 (SOR/62-324. Order in council P.C. 1962-1168 amending the New Brunswick fishery regulations made under the fisheries act.—22 August 1962)

Fr 8-07491.



- Manitoba. Laws, Statutes, etc.** (1962) MF  
8-07493  
*Statut. Manitoba*, 1961-1962, (10-11) Eliz. II, Chapter 21 : 61-2  
An act to amend the fish dealers act.—1 May 1962

Amendments respecting definitions, licences to engage in the business of a fish pedlar, suspension of licences when conditions on premises are detrimental to the quality of the fish, etc.

- Saskatchewan. Laws, Statutes, etc.** (1962) MF  
8-07494  
*Statut. Saskatchewan*, 1961-1962, 3rd Session of the 14th Legislature, Chapter 19 : 38-40

The pollution of waters (prevention) act, 1962, an act to prevent the pollution of certain waters.—30 March 1962

General prohibition respecting deposit of certain substances in or near waters. The use of substances for eliminating weeds, etc. is made subject to a permit. Chapter 319 of the revised statutes of Saskatchewan is repealed.

- Chile. Laws, Statutes, etc.** (1962) MF  
8-07495  
*Diario ofic., Santiago*, (25.281) : 1341

Decreto No. 680 por el que se aprueba modificaciones al reglamento general de policía marítima, fluvial y lacustre.—15 de junio de 1962 (Decree No. 680 approving modifications to the general maritime, river and lake police regulations.—15 June 1962)

Minor amendments.

- Cuba. Laws, Statutes, etc.** (1962) MF  
8-07496  
*Gaceta ofic. Cuba*, (50) : 3124-5

Resolución de la junta nacional para la distribución de los abastacimientos por la que se declara los artículos de consumo, sujetos a racionamiento en todo el territorio nacional.—13 de marzo de 1962 (Resolution of the national supplies distribution board declaring consumer goods subject to rationing.—13 March 1962)

Rationing on a local basis of fish.

- Denmark. Laws, Statutes, etc.** (1962) MF  
8-07497  
*Lovtidende A*, (14) : 597

Nr. 163. Bekendtgørelse om forhøjelse af mindstemålet for rødspætter.—11 maj 1962 (Notification No. 163, increasing the minimum size of plaice.—11 May 1962)

- Denmark. Laws, Statutes, etc.** (1962) MF  
8-07498  
*Lovtidende A*, (14) : 602

Nr. 167. Lov om ændring af lov om kvalitetskontrol med fisk og fiskevarer.—16 maj 1962 (Act No. 167, amending the act on quality control of fish and fish products.—16 May 1962)

In respect of fish food and fish meal.

- Denmark. Laws, Statutes, etc.** (1962) MF  
8-07499  
*Lovtidende A*, (18) : 694-707

Nr. 210. Bekendtgørelse om indførsel af varer m.v.—14. juni 1962 (Notification No. 210, concerning the importation of merchandise.—14 June 1962)

Also covers fish, crustaceans, and molluscs, etc.

- Guadeloupe. Laws, Statutes, etc.** (1962) MF  
8-07500  
*Rec. Actes adm. Guadeloupe*, (27) : 360-1

Arrêté n° 62-1.524 relatif au blocage des prix de tous les produits et services. (Order No. 62-1.524 relative to the freezing of the prices of all products and services.—11 July 1962)

Fish and fish products are exempted.

- Greece. Laws, Statutes, etc.** (1962) MF  
8-07501  
*Ephēm. Kybern.*, (II), (28) : 344

Agoranomiki Diátaxis up'arith. 3 perí trópou diathéseos nopōn ichthúon exoterikou (Supply order No. 3, relating to methods of handling fresh fish imported from abroad.—15 January 1962)

- Haiti. Laws, Statutes, etc.** (1962) MF  
8-07502  
*Monit., Haiti*, (51-52) : 195-206, 207-13

Loi modifiant le code rural de 1864 en vue de l'adapter aux conditions actuelles.—24 mai 1962 (Act modifying the rural code of 1864 to adapt it to present conditions.—24 May 1962)

Complete revision. Part ix deals with hunting and fishing and lays down general rules.

- Iraq. Laws, Statutes, etc.** (1962) MF  
8-07503  
*Wkly Gaz. Rep. Iraq.*, (28) : 510

Notification No. 1 of 1962, made under the fisheries law No. 41 of 1958.—Undated

Prohibits the fishing of the following species: shaboot, cittan, bunni fish, and coloured Japanese and Indonesian carp fish, under the prescribed sizes.

- Ireland. Laws, Statutes, etc.** (1961) MF  
8-07504  
*Statut. Instrum. Ire.*, (76) : 3

An tordú Um Líonta Iascaigh (Mogall a Rialú) (Leasú), 1961.—14ú lá seo d'Aibreán, 1961) (Fishing nets (regulations of mesh) (amendment) order, 1961.—14 April 1961)

Permits up to 14 April 1963, the use of certain fishing nets having a smaller mesh than that specified in 1954.

# MISCELLANEOUS AND AUXILIARIES

**Ireland. Laws, Statutes, etc. (1961)** MF  
8-07505  
Act No. 44 of 1961, Separate Publications, 21 p.

Acht Iascaigh an Fheabhail (Leasu), 1961.—20 Nollaig 1961 (Foyle fisheries (amendment) act, 1961: an act to amend the Foyle fisheries act, 1952.—20 December 1961)

Various amendments in respect of pollution and fishing regulations. Certain provisions of the fisheries (consolidation) act of 1959 are extended to Moville area.

**Ireland. Laws, Statutes, etc. (1962)** MF  
8-07506  
*Statut. Instrum. Ire.*, (24) : 3

An tordú Um Acht Iascaigh an Fheabhail (Leasú), 1961 (Tosach Feidhme), 1962.—16ú lá seo d'Fheabhra, 1962 (Foyle fisheries (amendment) act, 1961 (commencement) order, 1962.—16 February 1962)

Appoints 1 Mar. 1962 as the day on which the Foyle fisheries (amendment) act, 1961, comes into operation.

**Mexico. Laws, Statutes, etc. (1962)** MF  
8-07507  
*Diario ofic., Méx.*, (22) : 2-3

Acuerdo que dispone que la importación de anchoas, angulas y bocarte refrigerados o congelados, queda sujeta a previo permiso de la Secretaría de Industria y Comercio.—20 marzo 1962 (Order rendering the import of refrigerated or frozen anchovies, eels and bocarte subject to prior authorization by the Secretariat of Industry and Trade.—20 March 1962)

**Netherlands. Laws, Statutes, etc. (1962)** MF  
8-07508  
*Staatsblad, Den Haag*, Text 331 : 803-9

Besluit van 25 augustus 1962, houdende wijziging van het tariefbesluit 1960 en van daarmede samenhangende andere wettelijke maatregelen (Decree 1962-VII amending the import tariff: decree amending the 1960 tariff decree and various other legal measures.—25 August 1962)

Specifies import duties on products, including fish, both in general and for imports from European community.

**Norway. Laws, Statutes, etc. (1962)** MF  
8-07509  
*Norsk Lovtid.*, (9) : 140-1

Bestemmelser om endring av kongelig resolusjon av 19. mars 1954 om fredningsbestemmelser for Munkeelva og Sandneselva i Sør-Varanger.—1. mars 1962 (Circular amending the order in council of 19 March 1954, concerning the protection of fishing in Munkeelva, Sandneselva, in Sør-Varanger district.—1 March 1962)

Concerns open season, closed areas and mesh sizes.

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## Norway. Laws, Statutes, etc. (1962)

MF  
8-07510

*Norsk Lovtid.*, (18) : 365

Bestemmelse om opphevelse av kgl. resolusjon av 20. mars 1953 vedr. kvalitetskontroll med fiskehermetikk m.v. og om opphevelse av kgl. resolusjon av 30. mai 1958 vedr. merking av hermetisk nedlagte fiskevarer.—9. mai 1962 (Regulations abrogating the order in council of 20 March 1953, concerning quality control of fish preserves, etc., and the order in council of 30 May 1958 concerning the marking of fish preserves.—9 May 1962)

## Norway. Laws, Statutes, etc. (1962)

MF  
8-07511

*Norsk Lovtid.*, (18) : 365

Resolusjon om endr. av avsnitt I i kgl. resolusjon av 8. april 1960 om kvalitetskontroll med fisk og fiskevarer.—9. mai 1962 (Order in council amending section I of the order in council of 8 April 1960, concerning quality control of fish and fish products.—9 May 1962)

Authorizes fisheries department to issue regulations under various sections of the act of 28 May 1959.

## Norway. Laws, Statutes, etc. (1962)

MF  
8-07512

*Norsk Lovtid.*, (18) : 365-7

Bestemmelser om kvalitetskontroll med fiskehermetikk m.v.—9. mai 1962 (Measures concerning quality control of fish preserves, etc.—9 May 1962)

Assigns responsibilities of various administrative agencies.

## Norway. Laws, Statutes, etc. (1962)

MF  
8-07513

*Norsk Lovtid.*, (21) : 403

Resolusjon om opphevelse av sentraliseringen av eksporten av hermetisk nedlagt fisk til Filippinene.—1. juni 1962 (Order in council eliminating centralization of fish preserves exports to the Philippines.—1 June 1962)

## Philippines. Laws, Statutes, etc. (1962)

MF  
8-07514

*Off. Gaz.*, Manila, (22) : 4263-4

Executive order No. 10 designating calendar year 1962 as economic census year.—23 May 1962

Includes fishery.

## Poland. Laws, Statutes, etc. (1962)

MF  
8-07515

*Dziennik Ustaw*, (25), Text 115 : 210-1

Rozporządzenie ministra żeglugi z dnia 19 marca 1962 r. w sprawie ochrony rybołówstwa na Zalewie Wiślanym (Order of the ministry of the navigation relating to the protection of fishing in the Vistula estuary.—19 March 1962)

Fish and net sizes, etc. Repeals and replaces order of 4 February 1953, Dz. U. Text 58 and 1954/226.



**Portugal. Laws, Statutes, etc. (1961)**

MF  
8-07516

*Diário do Gov., Lisboa, 1 (82) : 407-8*

Portaria no. 18 3888: fixa os valores para a cobrança dos direitos de exportação referentes a mercadorias sujeitas a tributação *ad valorem*.—8 de abril de 1961 (Order No. 18 3888 fixing the amount of export duties on goods subject to *ad valorem* tax.—8 April 1961)

Includes fisheries products.

**Portugal. Laws, Statutes, etc (1961)**

MF  
8-07517

*Diário do Gov., Lisboa, 1 (96) : 474-5*

Portaria n.º 18 418: liberta da tabela de preços máximos anexa à portaria n.º 18 113 as vendas de peixe provenientes da pesca artesanal e estabelece algumas disposições sugeridas pela aplicação da portaria n.º 18 113.—25 de abril de 1961 (Order No. 18 418 freeing sales of fish caught by professional fishermen from the tariff of maximum sales prices set forth in the annex to order No. 18 113 and laying down certain provisions suggested by the application of order No. 18 113.—25 April 1961)

Refers to order No. 18 113 of 10 Dec. 1960 establishing new basic conditions governing trade in fish in continental Portugal.

**Portugal. Laws, Statutes, etc. (1961)**

MF  
8-07518

*Diário do Gov., Lisboa, 1 (299) : 1780*

Declaração: mantém em vigor, por mais um ano, a tabela de preços máximos de venda de peixe na loja, anexa à portaria n.º 18 113.—14 de dezembro de 1961 (Proclamation extending for a further year the maximum price rates for the sale of fish in fish markets as established in the annex to order No. 18 113.—14 December 1961)

Ci 61-12959. Order No. 18 113 appears in *D.G.* No. 285 of 10 Dec. 1960, p. 2739.

**Spain. Laws, Statutes, etc. (1962)**

MF  
8-07519

*Bol. ofic. Estado, Madr., (205) : 12201*

Resolución sobre incorporación al régimen de libre importación las mercancías que se citan.—23 de agosto de 1962 (Resolution including the goods quoted in the free import regime.—23 August 1962)

Includes fish and fish preparations.

**Sweden. Laws, Statutes, etc. (1962)**

MF  
8-07520

*Svensk Förf.Saml., (47-48) : 83*

Lag Nr 47 angående ändrad lydelse av 24 § lagen den 1 december 1950 (nr 596) om rätt till fiske.—9 mars 1962 (Act No. 47, amending art. 24 of act No. 596 of 1 December 1950 concerning fishing rights.—9 March 1962)

Minor amendments.

**Sweden. Laws, Statutes, etc. (1962)**MF  
8-07521*Svensk FörfSaml.*, (66-67) : 112

Kungl. Maj:ts Kungörelse Nr 67 angående ändrad lydelse av 5a § kungörelsen den 21 november 1952 (nr 699) med vissa bestämmelser om stodeken av maskor i fiskredskap av nät och om minimimått på fisk m.m.—16 mars 1962 (Royal order No. 67, amending art. 5a of order No. 699 of 21 November 1952, containing certain provisions concerning fish net meshes and establishing minimum sizes for fish, etc.—16 March 1962)

Undersized fish may be taken and sold, except for food, provided that they do not constitute more than 10% by weight of the lot.

**Sweden. Laws, Statutes, etc. (1962)**MF  
8-07522*Svensk FörfSaml.*, (98) : 245-6

Kungl. Maj:ts Kungörelse Nr. 98 om ändrad lydelse av mom. 4:0 kungörelsen den 7 augusti 1907 (nr 61 s. 1) angående ändrade bestämmelser rörande fonden för fiskerinäringens befrämjande.—13 april 1962 (Royal order No. 98 amending par. 4:0 of order No. 61, p. 1 of 7 August 1907, concerning the fisheries industry development fund.—13 April 1962)

In respect of loans from fund to economic organizations for the purchase of fishing craft and equipment.

**Syrian Arab Republic. Laws, Statutes, etc. (1962)**MF  
8-07523*Rec. Lois Répub. arabe syr.*, (8) : 42-51

Arrêté No. 480 du 19 août 1962 approuvant le tableau comportant les produits et articles exemptés du droit d'importation (2%) (Order No. 480 approving the schedule listing products and goods exempted from import duties (2%).—19 August 1962)

Also covers fisheries products.

**U.K. Laws, Statutes, etc. (1962)**MF  
8-07524*Statut. Instrum. U.K.*, (1393) : 2 p.

The salmon and migratory trout (drift-net fishing) licensing order 1962.—4 July 1962

As from 15 Sep. 1962, British-owned fishing boats may not fish with drift-nets for salmon or migratory trout in specified extra-territorial waters except under the authority of a licence. The specified waters include an extensive area off the east coast of England and a 25-mile belt round the remainder of the coast of England and Wales. Order valid until 15 Feb. 1965.

**U.K. Laws, Statutes, etc. (1962)**MF  
8-07525*Statut. Instrum. U.K.*, (1532) : 14 p.

The preservatives in food regulations 1962.—17 July 1962

Also covers raw fish and the use of tetracyclines.

# MISCELLANEOUS AND AUXILIARIES

MF  
8-07526

**U.S. Laws, Statutes, etc. (1962)**  
*Fed. Reg. U.S.*, (130) : 6389  
 Code of federal regulations, title 50—chapter 1—part 33: Sport fishing.  
 Klamath forest national wildlife refuge, Oregon.—21 April 1962

In respect of species, open season, daily creel limits, methods of fishing, etc.

MF  
8-07527

**U.S. Laws, Statutes, etc. (1962)**  
*Fed. Reg. U.S.*, (110) : 5399  
 CFR title 50—chapter 1—part 33: Sport fishing. Aleutian Island national wildlife refuge, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

MF  
8-07528

**U.S. Laws, Statutes, etc. (1962)**  
*Fed. Reg. U.S.*, (110) : 5399-400  
 CFR title 50—chapter 1—part 33: Sport fishing. Arctic national wildlife range, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

MF  
8-07529

**U.S. Laws, Statutes, etc. (1962)**  
*Fed. Reg. U.S.*, (110) : 5400  
 CFR title 50—chapter 1—part 33: Sport fishing. Clarence Rhode national wildlife range, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

MF  
8-07530

**U.S. Laws, Statutes, etc. (1962)**  
*Fed. Reg. U.S.*, (110) : 5400  
 CFR title 50—chapter 1—part 33: Sport fishing. Izembek national wildlife range, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

MF  
8-07531

**U.S. Laws, Statutes, etc. (1962)**  
*Fed. Reg. U.S.*, (110) : 5400  
 CFR title 50—chapter 1—part 33: Sport fishing. Kenai national moose range, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

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**U.S. Laws, Statutes, etc. (1962)**

MF  
8-07532

*Fed. Reg. U.S.*, (110) : 5400-1

CFR title 50—chapter 1—part 33: Sport fishing. Kodiak national wildlife refuge, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

**U.S. Laws, Statutes, etc. (1962)**

MF  
8-07533

*Fed. Reg. U.S.*, (110) : 5401

CFR title 50—chapter 1—part 33: Sport fishing. Nunivak Island national wildlife refuge, Alaska.—24 May 1962

Effective through 31 Dec. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

**U.S. Laws, Statutes, etc. (1962)**

MF  
8-07534

*Fed. Reg. U.S.*, (110) : 5398

CFR title 36—chapter 1—part 1: General rules and regulations. Fishing.—31 May 1962

The said rules and regulations are amended with a view to requiring any person fishing in the waters of the national monuments in Alaska to secure a State of Alaska sport fishing licence.

**U.S. Laws, Statutes, etc. (1962)**

MF  
8-07535

*Fed. Reg. U.S.*, (112) : 5506-7

CFR title 50—chapter 2—subchapter G—Processed fishery products, processed products thereof, and certain other processed food products—part 260: inspection and certification. Approved identification.—5 June 1962

The purpose of the addition of the new provisions is to require accountability by the processor of the removal or stripping of official United States Department of the Interior shields from packages of mislabeled fishery products.

**U.S. Laws, Statutes, etc. (1962)**

MF  
8-07536

*Fed. Reg. U.S.*, (139) : 6834-43

CFR title 50—chapter 2—subchapter F: Aid to fisheries—part 250: fisheries loan fund procedures. Revision of procedures.—12 July 1962

The purpose of the revision is to provide for procedural changes necessitated by transfer of certain acts formerly performed by the small business administration to the Department of the Interior, to clarify the meaning of several sections, and to provide published standards that insurance underwriters furnishing insurance in property serving as collateral for a fisheries loan must meet.



**U.S. Laws, Statutes, etc. (1962)**

MF

8-07537

*Fed. Reg. U.S.*, (155) : 7985-6

CFR title 42—chapter 1—subchapter D: Grants—part 55: grants for water pollution control—subpart B: Grants for construction of treatment works. Grant limitations.—3 August 1962

Amendments respecting grants for projects for treatment works the need for which is due in part to federal institutions or federal construction activity.

F

8-07538

**Wood, E. C. (1962)**

*Biometrics*, 18 (3) : 429

[Letter]

Ci 62-03387.

F

8-07539

**New South Wales. Laws, Statutes, etc. (1962)**

*Govt Gaz. N.S.W.*, (56) : 1688

Proclamation, made under the fisheries and oyster farms act, 1935, as amended, relating to the inland waters of New South Wales.—23 May 1962

Prohibits for a period of five years from 1 Jun. 1962, in the inland waters of New South Wales west of the crest of the Great Dividing Range, the taking of fish (a) by more than one handline; (b) by more than one rod and line, having not more than two hooks attached.

F

8-07540

**New South Wales. Laws, Statutes, etc. (1962)**

*Govt Gaz. N.S.W.*, (66) : 2020

Proclamation made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Wallis Lake, County of Gloucester.—13 June 1962

Prohibits in the specified tidal waters the taking of fish by long lines, 'jacobs', or bultows, fish traps, spears and other similar devices, from 11 Jul. 1962 to 10 Jul. 1967.

F

8-07541

**New South Wales. Laws, Statutes, etc. (1962)**

*Govt Gaz. N.S.W.*, (66) : 2020

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portions of waters of Wakool River and Yallakool Creek, Counties of Cadell, Townsend and Wakool.—20 June 1962

Prohibits in the specified inland waters the taking of fish by nets of every description, from 19 Aug. 1962 to 18 Aug. 1967.

F

8-07542

**Western Australia. Laws, Statutes, etc. (1962)**

*Govt Gaz. W. Aust.*, (56) : 1870

Proclamation F.D. 192/21, Ex. Co. No. 1411 made under the fisheries act, 1905-1961.—18 July 1962

Prohibits the taking of crayfish in the waters specified, from 15 Aug. 1962 to 28 Feb. 1963.

F

**Canada. Laws, Statutes, etc. (1962)** 8-07543  
*Can. Gaz. (II), (7) : 411*

SOR/62-123. Order in council P.C. 1962-431 amending the Ontario fishery regulations made under the fisheries act.—29 March 1962

No holder of a non-resident angling licence shall export or take from Ontario fish taken under the authority of that licence that are so skinned or cut as to make it impossible: (a) to identify the species of any such fish, or (b) to determine the number of fish.

F

**Canada. Laws, Statutes, etc. (1962)** 8-07544  
*Can. Gaz. (II), (7) : 422*

DORS/62-123. Décret C.P. 1962-431 modifiant le règlement de pêche de l'Ontario en vertu de la loi sur les pêcheries.—29 mars 1962 (SOR/62-123. Order in council P.C. 1962-431 amending the Ontario fishery regulations made under the fisheries act.—29 March 1962)

*Fr* 8-07543.

F

**Canada. Laws, Statutes, etc. (1962)** 8-07545  
*Can. Gaz. (II), (10) : 585-6*

SOR/62-184. Order in council P.C. 1962-679 amending the Yukon territory fishery regulations made under the fisheries act.—12 May 1962

The area director may, for the purpose of ensuring a regular supply of fish for consumption in the Yukon territory throughout the year, issue to the holder of a commercial licence a special permit authorizing commercial fishing by the licensee for that purpose in any lake specified in the permit after the quota for that lake has been reached. New schedule on quota of white and lake trout from 1 May 1962 to 31 Mar. 1963.

F

**Canada. Laws, Statutes, etc. (1962)** 8-07546  
*Can. Gaz. (II), (10) : 610-11*

DORS/62-184. Décret C.P. 1962-679 modifiant le règlement de pêche du territoire du Yukon en vertu de la loi sur les pêcheries.—12 mai 1962 (SOR/62-184. Order in council P.C. 1962-679 amending the Yukon territory fishery regulations made under the fisheries act.—12 May 1962)

*Fr* 8-07545.

F

**Canada. Laws, Statutes, etc. (1962)** 8-07547  
*Can. Gaz. (II), (11) : 609*

SOR/62-198. Order in council P.C. 1962-766 amending the national parks fishing regulations made under the national parks act.—28 May 1962

F  
8-07548

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (12) : 641-2

SOR/62-212. Order in council P.C. 1962-823 amending the Manitoba fishery regulations made under the fisheries act.—12 June 1962

In respect of bag limits, closed seasons, closed areas and summer fishing for white fish and pickerel for commercial purposes.

F  
8-07549

**Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (12) : 667-8

DORS/62-212. Décret C.P. 1962-823 modifiant le règlement de pêche du Manitoba en vertu de la loi sur les pêcheries.—12 juin 1962 (SOR/62-212. Order in council P.C. 1962-823 amending the Manitoba fishery regulations made under the fisheries act.—12 June 1962)

*Fr* 8-07548.

F  
8-07550

**Ceylon. Laws, Statutes, etc. (1962)**  
*Ceylon Govt Gaz.*, (13,217) Pt. 1, Sect. 1 : 1887-8

Food price order No. C 350 relating to dried fish and dried prawns, made under the control of prices act, No. 29 of 1950.—20 July 1962

Fixes maximum wholesale and retail prices and revokes order No. C 374 of 7 May 1962.

F  
8-07551

**Chile. Laws, Statutes, etc. (1962)**  
*Diario ofc., Santiago*, (25,281) : 1341-2

Decreto No. 309 por el que se reglamenta la captura de especies salmonídeas en todo el país.—5 de junio de 1962 (Decree No. 309 regulating the catching of salmonides throughout Chile.—5 June 1962)

Prohibits for an indefinite period fishing, selling, processing and transport of Salmonidae originating from Chilean inland waters.

F  
8-07552

**Italy. Laws, Statutes, etc. (1962)**  
*Gazz. uff. Repub. ital.*, (160) : 2562

Decreto ministeriale relativo alle registrazioni alla pesca del pesce persico nel lago di Bracciano (Roma).—12 giugno 1962. (Ministerial decree relating to restrictions on perch fishing in Bracciano Lake (Rome province).—12 June 1962)

Prohibits taking perch under 22 cm.

F  
8-07553

**Morocco. Laws, Statutes, etc. (1962)**  
*Bull. off. Emp. chérif.*, (2591) : 796, 820

Arrêté n° 348-62 du 9 juin 1962 modifiant et complétant l'arrêté du 2 mars 1962 portant réglementation annuelle de la pêche dans les eaux continentales et fixant les périodes spéciales d'interdiction et les réserves de pêche pendant la saison 1962-1963 (Order No. 348-62 amending and supplementing the order of 2 March 1962 laying down annual fishing regulations in continental waters and prescribing special closed seasons and fishing reserves for the 1962-1963 season.—9 June 1962)

Addition of three annual reserves.

F  
8-07554

**Netherlands. Laws, Statutes, etc.** (1962)  
*Ned. Staatscourant*, (122) : 2 p.

Nr. Vi. 2655. Maat kolblei en brasem.—22 juni 1962 (Order No. Vi. 2655 relative to dimension of the *Cyprinus blicca* and the bream.—22 June 1962)

Provisions relative to the minimum dimensions of the above-mentioned fish suspended until 1 Jun. 1963.

F  
8-07555

**New Zealand. Laws, Statutes, etc.** (1961)  
*Statut. Rules N.Z.*, 1961/70 : 2 p.

The Rotorua trout fishing regulations 1960, amendment No. 1: Amendment No. 1 to the Rotorua trout fishing regulations 1960, made under the fisheries act, 1908.—21 June 1961

Extends the principal regulations for a further two years and restricts fly-fishing in parts of Tarawera River and Kaituna River.

F  
8-07556

**New Zealand. Laws, Statutes, etc.** (1961)  
*Statut. Rules N.Z.*, 1961/71 : 1 p.

Amendment No. 1 to the Taupo trout fishing regulations, 1960, made under the fisheries act, 1908.—21 June 1961

Ci 62-09513. Extends the principal regulations for a further two years.

F  
8-07557

**New Zealand. Laws, Statutes, etc.** (1961)  
*Statut. Rules N.Z.*, 1961/111 : 5 p.

Notice 1961 modifying the freshwater fisheries regulations (North Canterbury).—8 September 1961

In respect of bag limits, size limits, baits and open season.

F  
8-07558

**New Zealand. Laws, Statutes, etc.** (1961)  
*Statut. Rules N.Z.*, 1961/112 : 3 p.

Modification notice 1961 respecting the freshwater fisheries regulations (Marlborough and Nelson).—8 September 1961

In respect of bag limits, size limits, baits and open season.

F  
8-07559

**New Zealand. Laws, Statutes, etc.** (1961)  
*Statut. Rules N.Z.*, 1961/113 : 3 p.

Modification notice 1961 respecting the freshwater fisheries regulations (Ashburton).—8 September 1961

In respect of bag limits, size limits, baits and open season.



# MISCELLANEOUS AND AUXILIARIES

F

**New Zealand. Laws, Statutes, etc. (1961)** 8-07560  
*Statut. Rules N.Z.*, 1961/114 : 2 p.  
 Modification notice 1961 respecting the freshwater fisheries regulations (Hawke's Bay).—8 September 1961

In respect of bag limits, size limits and baits.

F

**New Zealand. Laws, Statutes, etc. (1961)** 8-07561  
*Statut. Rules N.Z.*, 1961/115 : 3 p.  
 Modification notice 1961 respecting the freshwater fisheries regulations (South Canterbury, Waimate, and Waitaki).—8 September 1961

In respect of bag limits, size limits, baits and open season.

F

**New Zealand. Laws, Statutes, etc. (1961)** 8-07562  
*Statut. Rules N.Z.*, 1961/116 : 3 p.  
 Modification notice 1961 respecting the freshwater fisheries regulations (Otago).—8 September 1961

In respect of bag limits, size limits, baits and open season.

F

**New Zealand. Laws, Statutes, etc. (1961)** 8-07563  
*Statut. Rules N.Z.*, 1961/117 : 3 p.  
 Modification notice 1961 concerning the freshwater fisheries regulations (Southland).—8 September 1961

In respect of bag limits, size limits, baits and open season.

F

**New Zealand. Laws, Statutes, etc. (1961)** 8-07564  
*Statut. Rules N.Z.*, 1961/118 : 3 p.  
 Modification notice 1961 concerning the freshwater fisheries regulations (Wellington).—8 September 1961

In respect of bag limits, size limits, baits and open season.

F

**New Zealand. Laws, Statutes, etc. (1961)** 8-07565  
*Statut. Rules N.Z.*, 1961/125 : 4 p.  
 Amendment No. 8 to the southern lakes fishing regulations 1951.—27 September 1961

In respect of open season, baits, size limits, etc.

M

**Norway. Laws, Statutes, etc. (1962)** 8-07566  
*Norske Lovtid.*, (12) : 198

Resolusjon om endr. av § 11, annet ledd, i Kronprinsregentens resolusjon av 22. desember 1955 om bestemmelser om saltvannsfiskeriene.—23. mars 1962 (Resolution amending art. 11, para. 2, of the regent's resolution of 22 December 1955, governing fishing in salt water.—23 March 1962)

Prohibition to use any equipment to reduce net meshes.

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## Poland. Laws, Statutes, etc. (1962)

F  
8-07567

*Dziennik Ustaw*, (34), Text 158 : 289-304

Ustawa z dnia 30 maja 1962 r. Prawo wodne (Water act.—30 May 1962)

Ci 61-10021. Very comprehensive text repealing and replacing *inter alia* the water act of 19 Sep. 1922 as amended, and the act relative to the protection of waters against pollution of 31 Jan. 1961. Contains numerous provisions dealing with water pollution, in particular chapter 2 of part 4, entitled "protection of water against pollution". Inland surface and ground-waters, waters of inland seas and the territorial sea are covered.

## Poland. Laws, Statutes, etc. (1962)

F  
8-07568

*Dziennik Ustaw*, (31), Text 149 : 257-60

Obwieszczenie prezesa rady ministrów z dnia 31 maja 1962 r. w sprawie ogłoszenia jednolitego tekstu rozporządzenia rady ministrów z dnia 22 maja 1958 r. w sprawie wykonania ustawy z dnia maja 1958 r. o popieraniu melioracji wodnych dla potrzeb rolnictwa (Notification relative to the publication of a consolidated text of the order regulating application of the act of 22 May 1958 concerning promotion of agricultural water improvements.—31 May 1962)

Percentages of participation, by land owners, in the cost of works, including the construction and renovation of fish ponds.

## U.K. Laws, Statutes, etc. (1962)

F  
8-07569

*Statut. Instrum. U.K.*, (1751) : 2 p.

The river Taw mussel fishery order 1962.—3 August 1962

Confers rights of several or exclusive mussel fishery in part of the bed and foreshore of the river Taw.

## U.S. Laws, Statutes, etc. (1962)

F  
8-07570

*Fed. Reg. U.S.*, (113) : 5540

CFR title 50—chapter 1—part 33: Sport fishing. Necedah national wildlife refuge, Wisconsin.—4 June 1962

Effective to 16 Sep. 1962. In respect of species permitted to be taken, open season, daily creel limits, methods of fishing, etc.

## U.S. Laws, Statutes, etc. (1962)

F  
8-07571

*Fed. Reg. U.S.*, (118) : 5769

CFR title 50—chapter 1—subchapter C: National wildlife refuge system—part 33: Sport fishing. Klamath forest national wildlife refuge.—12 June 1962

Addition of one area (Oregon) where sport fishing is authorized.

# MISCELLANEOUS AND AUXILIARIES

F  
8-07572

**U.S. Laws, Statutes, etc. (1962)**  
*Fed. Reg. U.S.*, (128) : 6280-1

CFR title 36—chapter 1—part 1: General rules and regulations. Fishing in national parks.—27 June 1962

The purpose of the amendments is to permit the use of seines for procuring bait and to permit the use of minnows for bait in Big Ben national park.

F  
8-07573

**U.S. Laws, Statutes, etc. (1962)**  
*Fed. Reg. U.S.*, (131) : 6431-2

CFR title 36—chapter 1—part 7: Special regulations relating to parks and monuments. Great Smoky Mountains national park, North Carolina and Tennessee; fishing.—6 July 1962

The purpose of the amendment to the above regulations is to close additional waters to general fishing and to provide special fishing streams for the exclusive use of children under age twelve.

F  
8-07574

**U.S. Laws, Statutes, etc. (1962)**  
*Fed. Reg. U.S.*, (168) : 8616

CFR title 36—chapter 1—part 7: Special regulations relating to parks and monuments. Big Ben national park, Texas; fishing.—28 August 1962

The purpose of the amendment to the above regulations is to establish a suitable management program for the waters of the park in the interest of fish conservation.

F  
8-07575

**Yugoslavia. Laws, Statutes, etc. (1962)**  
*Služb. List*, (27), Text 532 : 512-5

Naredbu o osnovnim podacima investicionog programa koje investitori iz oblasti melioracije zemljišta, regulacije rijeka, zaštite od poplava i izgradnje ribnjaka dužni dostovljati organu uprave kotarskog narodnog odbora.—23 lipnja 1962 (Ordinance specifying the basic investment programme data which investors in the field of land improvement, river regulation, flood protection and fish pond construction are required to furnish to the administrative services of the district people's committee.—23 June 1962)

G  
8-07576

**Stebbins, G. L. (1962)**  
*Nature, Lond.*, 196 (4855) : 611-7

International horizons in the life sciences

Substance of an address delivered at Corvallis, in Aug. 1962, under the auspices of the AIBS. Gives information on the International Biological Programme provided by IUBS; some items concern basic communities, productivity of marine and freshwater.

G  
8-07577

**Skellman, J. G. (1962)**  
*Biometrics*, 18 (3) : 418-9

An introduction to the mathematics of medicine and biology  
 Re 61-05226.





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## VOLUME 8—PART 8—REFERENCES

8-08001 to 8-08571

### GENERAL (OCEANOGRAPHY, LIMNOLOGY, AND FISHERIES)

- Poulsen, E. M.** (1962) M  
8-08001  
*ICNAF Newslett.*, (43) : 4 p.

Co 8-02011.

- Worthington, L. V.** (1962) M  
8-08002  
*Oceanus*, 9 (1) : 21  
'Erika Dan' cruise

Brief popular note on itinerary and objectives of cruise to the Labrador Sea and Davis Strait.

- Oshite, K.** (1961) M  
8-08003  
*Inform. Bull. Planktol. Japan*, 7 : 39-40  
(Development of marine geology in Japan). *Ni*

- Komaki, Y.** (1962) M  
8-08004  
*Inform. Bull. Planktol. Japan*, 8 : 22-6  
(Establishment of the Ocean Research Institute, University of Tokyo).  
*Ni En*

Preliminary announcement of establishment of the institute, with list of chairs and main features of research vessel.

- Motoda, S.** (1962) M  
8-08005  
*Inform. Bull. Planktol. Japan*, 8 : 26-9  
(International biological centre to be established in India). *Ni En*

Functions of the centre, responsibilities of its curator; list of Japanese experts desiring to examine planktonic and nektonic animals collected in the course of the Indian Ocean Expedition for which the centre will be established.

- Masuzawa, J.** (1962) M  
8-08006  
*Oceanogr. Mag.*, 13 (2) : 119-21  
Preliminary report of the Japanese Expedition of Deep-Sea, the fourth cruise, 1961 (JEDS-4)

Preliminary statement of area of investigation, observational programme, staff. Issued also as: *Contr. Jap. Exp. deep Sea*, (29). *Ci* 8-08043.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

M

**France. Comité Central d'Océanographie et d'Étude des Côtes** 8-08007  
(1962)  
*Cah. océanogr.*, 14 (10) : 683-771

Ci 8-08062, 8-08053, 8-08055, 8-08056. Contains sections on general information, technical notes, documentation received by secretariat, and tables and diagrams of observations.

M

**France. Comité Central d'Océanographie et d'Étude des Côtes** 8-08008  
*Cah. océanogr.*, 14 (9) : 611-82

Ci 8-08054 and 8-08057. Contains sections on general information, technical notes, documentation received by secretariat, and tables and diagrams of observations.

M

**IMCO (1962)** 8-08009  
London, 93 p.

International conference on prevention of pollution of the sea by oil, 1962

Do 61-326me. Final act, amended 1954 convention, charts of prohibited zones; list of participants; form for oil record book; resolutions.

M

**ICNAF (1962)** 8-08010  
*Annu. Proc. inst. Comm. Northw. Atlant. Fish.*, (12), 1961-1962 : 34 p.

Do 61-145me. Contains administrative report, financial statement, summaries of research by sub-areas, list of participants and agenda. Annual proceedings appears in form and with content different from that of preceding volumes. Summaries of researches by countries, which in previous years made up Part 3 are now published in the "Redbook" Part 2. Selected papers from Annual Meeting, in previous annual proceedings included in Part 4, are published in "Redbook" Part 3. List of scientists and laboratories engaged in commission's work, published every second year, is to be found in annual proceedings, Vol. 2.

M

**Sim, J. S. (1962)** 8-08011  
*Bull. Fish. Coll. Pusan Univ.*, 4 (1/2) : 39-48  
(Studies on accuracy of celestial fix, at fishing boats). Ni En

# GENERAL

- Ivanov, A. V.** (Carlisle, D. B., Transl.) (1963) M  
8-08012  
London, Academic Press, 479 p. Pogonophora

Centralized information source for the class Pogonophora. In part 1, general account, describes in detail external morphology and the general body plan, the integument and associated structures, musculature and papillae, nervous system and sense organs, the coelom and its derivatives—the excretory system, the blood-vascular system, the tentacular apparatus and external digestion, the reproductive system, embryological development, the tube, ecology, geographical distribution, systematic position of the Pogonophora and evolution within the class, methods of investigation. In part 2 systematic account gives a key for the determination of orders, families and genera; and describes with ill. spp. of genera *Oligobrachia*, *Nereilinum*, *Birsteinia*, *Siboglinum*, *Siboglinoides*, *Heptabrachia*, *Cyclobrachia*, *Diplobrachia*, *Zenkevitchiana*, *Polybrachia*, *Galathealinum*, *Sclerolinum*, *Lamellisabella* and *Spirobrachia*. Incl. key for the identification of spp. from their tubes. Appends systematic and subject indexes.

- Genka, T. & K. Tagucki** (1961) M  
8-08013  
*Mem. Fac. Fish. Kagoshima*, 10 : 102–17

(Study on the effects of time-difference measured by Loran at the fixed spot in Kagoshima). *Ni* En

- Hache, A.** (1962) MG  
8-08014  
*Bull. Cent. Étud. Rech. Sci., Biarritz*, 4 (1) : 67–76

Compte rendu résumé des journées d'études de la corrosion en atmosphère marine des matériaux métalliques. Principales discussions et conclusions (Summary and record of the meeting on corrosion of metallic materials in a marine atmosphere. Main discussions and conclusions)

- Anon.** (1962) MG  
8-08015  
*New Scient.*, 16 (315) : 488–9

The submarine robot which helps the oil men

Short informative note announcing the use of a robot by the American Shell Company which could work on the ocean bed at 1,000 feet depth. It is operated by electro-hydraulic means. Has lights, television, sonar equipment and hydrophones.

- Anon.** (1962) MF  
8-08016  
*Inform. Bull. Pacif. Sci. Ass.*, 14 (4)

Notes on: formation of Ocean Research Institute, Tokyo; Unesco meetings in Latin America; appointment of Serene as marine taxonomic expert in southeast Asia area; and establishment of a fisheries division in government of Fiji.

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- Anon. (1962)** MF  
8-08017  
*Fish. Newslett. Aust.*, 21 (10) : 17  
Commonwealth-State Conference
- Main decisions of Commonwealth-State Fisheries Conference, 19-20 Sep., Sydney.
- Anon. (1962)** MF  
8-08018  
*France Pêche*, 7 (68) : 59  
Le futur laboratoire de Boulogne-sur-Mer (The future laboratory of Boulogne-sur-Mer)
- Short note on the new building for the laboratory for the French Scientific Institute for Marine Fisheries.
- Anon. (1962)** MF  
8-08019  
*Proc. Indo-Pacif. Fish. Coun.*, 9 (1) : 1-299
- Proceedings of the Council in plenary meetings, and reports of its Technical Committee 1 on resources work, and of its Technical Committee 2 on work on craft and gear, food technology, and socio-economics, statistics and marketing.
- Australia. Commonwealth (1964)** MF  
8-08020  
*Rep. gen. Assemb. U.N. Adm. Territ. Nauru*, 1962-1963 : 98 p.
- Gives a description of the territory and its status. Reports international and regional relations, political, social and economical advancements. Lists publications. Incl. a chapter on fisheries.
- Anon. (1962)** MF  
8-08021  
*Fish. Newslett. Aust.*, 21 (11) : 15-6, 20  
Minister's report on fisheries fund
- Report on expenditures from Australian fisheries development trust account, on pilot trawling enterprise in Great Australian Bight; tuna fishing in south-western Australia, training, and research on crayfish.
- Dentscheff, D. (1961)** F  
8-08022  
*Dtsch. Fisch.-Ztg.*, 8 (8) : 239-40  
Der Staatliche Fischereibetrieb in Samokov, Bulgarien (The governmental fishing plant of Samokov, Bulgaria)
- Kumpf, W., B. Dieterich & J. Kumpf (1960)** F  
8-08023  
München, R. Oldenbourg Verlag, 278 p.  
Radioaktive Substanzen und Wasser (Radioactive substances and water)
- Documentation based on the international meetings at Geneva (1955) and Cleveland (1955).



# GENERAL

- Anon. (1962)** F  
8-08024  
*Eau, Paris*, 49 (7) : 193  
 Revue des livres. Radioaktive Substanzen und Wasser (Book reviews.  
 Radioactive substances and water)

Re 8-08023.

- Alaska. Department of Fish & Game** (n.d. 1962) MF  
8-08025  
*Progr. Rep. Alaska Dep. Fish Game*, 1960-1961-1962 (12) : 77 p.

Co 61-12709. Reports the harvest and its value, research, development, regulatory management, support functions and activities and organizations. Gives landing statistics for important fish and shellfish. Lists scientific publications and films.

- Ashbaugh, B. L. & M. Beuschlein** (1960) FG  
8-08026  
*Educ. Ser. Md Dep. Res. Educ.*, (45) : 163 p.  
 Things to do in science and conservation

An elementary teaching manual incl. references to fisheries conservation and water use.

- FAO** (1962) G  
8-08027  
 Rome, mimeo : 14 p.

Report of the director-general of the Food and Agriculture Organization of the United Nations on the second regional conference for Africa which convened in Tunis on 1 November 1962

Do 61-308me. Lists delegations of member countries and organizations represented. Gives text of resolutions passed.

- Barrington, E. J. W.** (1962) G  
8-08028  
*Nature, Lond.*, 196 (4857) : 820-1  
 Comparative endocrinology in Europe

Short informative note on a Conference of European Endocrinologists held at the Zool. Soc., London during 19-21 Sep. Some discussions concerned the control of colour change in crustaceans, and the growth and moulting of crustaceans were discussed as well as the pituitary gland, the neurohypophysial hormones, modes of action of hormones and the sex hormones.

- Anon. (1961)** G  
8-08029  
*Zool. Mag., Tokyo*, 71 (1/2) : 1-64  
 (Proceedings of the thirty-second annual meeting of the Zoological Society of Japan). *Ni*

Appears to be abstracts of papers presented.

## PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

- M  
8-08030
- Reid, J. L., Jr.** (Edit.) (1960)  
Berkeley, University of California Press  
Oceanic observations of the Pacific 1955. The NORPAC atlas

Physical, chemical and biological data collected during the NORPAC cruises—maps of temperature, salinity, dissolved oxygen, inorganic phosphate-phosphorus, thermocline anomaly, geopotential anomaly, zooplankton, fish larvae, whales and porpoises.

- M  
8-08031
- Holmes, R. W. & M. Blackburn** (1960)  
*Spec. sci. Rep. U.S. Fish Wildl. Serv.—Fish.*, (345) : 109 p.  
Physical, chemical and biological observations in the Eastern Tropical Pacific Ocean Scot expedition, April–June 1958

WFA 14 (1) : 14-1075. Describes methods used and lists in tabular form the results obtained. The main object of the expedition was to study the distribution of ocean properties in the region as a whole at a different season and with greater coverage than in any former expedition.

- M  
8-08032
- Kawai, H. & M. Sasaki** (1961)  
*Bull. Tohoku Fish. Res. Lab.*, 19 : 119-34  
An example of the short-period fluctuation of the oceanographic condition in the vicinity of the Kuroshio front. Ni

Changes in water mass distribution; horizontal distribution of phosphate-phosphorus, phytoplankton and zooplankton and changes in these with time in the respective moving water masses; discussion of the shift of the skipjack fishing ground in accordance with change in hydrographic conditions.

- M  
8-08033
- Fallar, A. J.** (1962)  
*Oceanus*, 9 (1) : 3-11  
Atmospheric model studies

Popular account of experiments with a large rotating model basin in which circulation patterns are simulated.

- M  
8-08034
- Bowin, C.** (1962)  
*Oceanus*, 9 (1) : 22-3  
A new system for the automatic measurement of gravity at sea

Brief note describing equipment on R.V. 'Chain'.

- Kitamura, H.** (1962) M  
8-08035  
*Bull. Kobe Mar. Obs.*, 168 : 40-94  
 (Marine chemical studies on the phosphorus distributed in the North Pacific Ocean). *Ni En*

Study of phosphate phosphorus: vertical distribution, relation with inorganic silicon and nitrogen compounds; comparison of total phosphate in these waters with those in North Atlantic; particulate phosphate; characterization of sea waters in terms of phosphorus/salinity relation.

- Anon.** (1962) M  
8-08036  
*Bull. Kobe Mar. Obs.*, 168 : 1-39  
 (The results of the marine meteorological observations on board the 'Shumpu Maru' in the Harima Nada (from Jan. 18th to Feb. 6th, 1961). *Ni En*

Analysis of data on wind and wave. With respect to wind: vertical profile over the sea, relation of observed wind with geostrophic wind, variations of velocity; to wave: distribution, effects of islands, shallows and tidal currents generation and dissipation, comparison of observed with predicted height, sea state and wave height.

- Yasui, M. & T. Nan'niti** (1962) M  
8-08037  
*Oceanogr. Mag.*, 13 (2) : 133-6  
 Ill. deep sea current measurement during the JEDS-4

Measurement by means of neutral buoyancy float. Issued also as: *Contr. Jap. Exp. deep Sea*, (37).

- Nasu, N. & T. Sato** (1962) M  
8-08038  
*Oceanogr. Mag.*, 13 (2) : 155-66  
 7. Geological results in the Japanese Deep Sea Expedition in 1961 (JEDS-4)

Description of bottom topography; nature of bottom materials found. Issued also as: *Contr. Jap. Exp. deep Sea*, (35), *Coll. Repr. Ocean Res. Inst., Univ. Tokyo*, 1 : *Contr.* 6, 1962. Ci 8-08159.

- Uyeda, S. et al.** (1962) M  
8-08039  
*Oceanogr. Mag.*, 13 (2) : 167-83  
 8. Report on geomagnetic survey during JEDS-4 cruise

General contour lines of equal total field intensity, variation in total force, and its distribution around a sea mount; tables of observations. Issued also as: *Contr. Jap. Exp. deep Sea*, (36). Ci 8-08038.

- Takenouti, Y., T. Nan'niti & M. Yasui** (1962) M  
8-08040  
*Oceanogr. Mag.*, 13 (2) : 89-101  
 The deep-current in the sea east of Japan

Study by means of neutral-buoyancy float; tidal effect on deep current and the energy dissipation in the mean current are dealt with. Issued also as: *Contr. Jap. Exp. deep Sea*, (28).

- M  
8-08041
- Masuzawa, J., T. Tsuchida & T. Inoue** (1962)  
*Oceanogr. Mag.*, 13 (2) : 77-87

The monthly mean sea-surface temperature in the northwestern Pacific

Monthly charts of mean temperature, also charts of mean value between maximum and mean, and of range.

- M  
8-08042
- Miyazaki, M., S. Unoki & T. Ueno** (1962)  
*Oceanogr. Mag.*, 13 (2) : 103-17

Theoretical investigations of typhoon surges along the Japanese coast (2)

Deals with rotational cases, for large basins in which Corioli's terms become important. The computer programme is given and charts are presented of the computed horizontal distribution of surges and of wind driven currents in the case of two typhoons, to compare computed with observed values.

- M  
8-08043
- Masuzawa, J. & H. Akamatsu** (1962)  
*Oceanogr. Mag.*, 13 (2) : 122-30

1. Hydrographic observation during the JEDS-4

Station list (depth, T, Cl, O<sub>2</sub>, P, Si, pH, CO<sub>2</sub>, discussion of results on T, salinity and geostrophic current. Ci 8-08045.

- M  
8-08044
- Takano, K.** (1962)  
*J. oceanogr. Soc. Japan*, 18 (2) : 59-67

Circulation générale permanente dans les océans—un calcul numérique complémentaire (Stationary general circulation in the oceans—a complementary numerical calculation). En

Development of previously presented formulae, based on several assumptions, by removing the assumption that the friction due to horizontal eddy viscosity is proportional to the horizontal velocity.

- M  
8-08045
- Miyake, Y. et al.** (1962)  
*Oceanogr. Mag.*, 13 (2) : 131-2

2. Chemistry in the Japanese Expedition of Deep Sea (JEDS-4)

Brief discussion of vertical distribution of dissolved O<sub>2</sub>, phosphate-P and silicate Si. Issued also as: *Contr. Jap. Exp. deep Sea*, (30). Ci 8-08043.

- M  
8-08046
- Kajiura, K.** (1962)  
*J. oceanogr. Soc. Japan*, 18 (2) : 49-58

A note on the generation of boundary waves of Kelvin type

The generation of Kelvin waves along a straight boundary due to the reflection of cylindrical waves is studied in a rotating sea of constant depth. The result is applied to the discussion of an internal wave of Kelvin type generated by an atmospheric disturbance.



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- Iwata, N.** (1962) M  
8-08047  
*J. oceanogr. Soc. Japan*, 18 (2) : 69-72  
 Effekt der Meeresströmung auf interne Wellen im offenen Meer (Effect of current on internal waves in the open sea). En  
 Characteristics equation, phase velocity of internal waves and continuous depth distribution.
- Nan'niti, T.** (1962) M  
8-08048  
*J. oceanogr. Soc. Japan*, 18 (2) : 73-7  
 Deep-sea current measurements  
 Estimate of eddy diffusion at deep sea bottom and measurements of deep currents in the western North Pacific.
- Hishida, K.** (1962) M  
8-08049  
*J. oceanogr. Soc. Japan*, 18 (2) : 79-84  
 On the variation of the turbidity in the sea water (1)  
 Examination of relation between turbidity and meteorological conditions, water temperature and density.
- Dunn, G. E. & B. I. Miller** (1960)\* M  
8-08050  
 Baton Rouge, La St. Univ. Press, 326 p.  
 Atlantic hurricanes
- Carbonnel, J.-P.** (1962) M  
8-08051  
*Nature, Paris*, (3331) : 475-81  
 Une science et un art: la topographie sous-marine. Comment fut établie la carte de la Méditerranée occidentale (A science and an art: marine topography. How the western Mediterranean chart was established)  
 Popular article reviewing the history and methods used in the preparation of the Bourcart (and his collaborators) chart.
- Bianucci, G. & G. De Stefani** (1962)\* M  
8-08052  
*Acqua industr.*, 4 (17) : 14-22  
 The physical chemistry of sea water
- Legand, M. & H. Rotschi** (1962) M  
8-08053  
*Cah. oceanogr.*, 14 (10) : 703-18  
 Bilan des recherches océanographiques françaises en Mer du Corail entre 1956 et 1961 (Review of the French oceanographic research in the Coral Sea between 1956 and 1961)  
 Review of results of the cruises of the 'Orsom III' and 'Tiare' and summary of the main conclusions on water mass movement, physical and chemical pattern and their relations to qualitative and quantitative plankton distribution in the area.

**Berrit, G. R. (1962)**M  
8-08054*Cah. océanogr.*, 14 (9) : 633-43

Contribution à la connaissance des variations saisonnières dans le golfe de Guinée. Observations de surface le long des lignes de navigation. 2ème partie: Étude régionale (Contribution to the knowledge of the seasonal variations in the gulf of Guinea. Surface observations along the navigation lines. 2nd part: Regional study)

Co 62-06407.

**Berrit, G. R. (1962)**M  
8-08055*Cah. océanogr.*, 14 (10) : 719-29

Contribution à la connaissance des variations saisonnières dans le golfe de Guinée. Observations de surface le long des lignes de navigation. 2ème partie: Étude régionale. (Suite et fin) (Contribution to the knowledge of the seasonal variations in the gulf of Guinea. Surface observations along the navigation lines. 2nd part: Regional study. (Continuation and end) )

Co 62-06407 and 8-08054. Zones of upwelling and off-shore observations.

**Anon. (1962)**M  
8-08056*Cah. océanogr.*, 14 (10) : 739-47

Résultats d'observations (Results of observations)

Tables of data and diagrams. Contains: 1. Hydrological observations of the meteorological ship 'France 1', from Oct. to Dec. 1960 in station 1 (44° 50' N-15° 59' W); 2. Recoveries of drift cards for the study of surface currents; 3. Tide observations at Dakar (first half 1960).

**Anon. (1962)**M  
8-08057*Cah. océanogr.*, 14 (9) : 673-82

Résultats d'observations (Results of observations)

Tables of data and diagrams. 1. Oceanographic surface observations. 2. Observations of sea level at the I.G.Y. coastal station at Nosy-Be (Madagascar).

**Longhurst, A. R. (1962)**M  
8-08058*Bull. Inst. franç. Afr. noire*, 24 (3) : 633-63

A review of the oceanography of the gulf of Guinea. Fr

Based on previously published work and original research in progress at Lagos. Refers to the meteorology, water masses and movement, troposphere, distribution of oxygen and phosphates, biological oceanography in the area.

- Silvester, R.** (1962) M  
8-08059  
*Nature, Lond.*, 196 (4857) : 819-20  
 Coastal processes

Short informative note on the Seminar on Coastal Processes held at the Department of Geography, University of Cambridge, 29-30 Jun. Discussions concentrate on wave generation as it affects sediment movement; beach processes, in the surf zone and beyond; beach cycles, annual and long term; equilibrium shapes of coastline in plan; world-wide sediment movement.

- Hamon, B. V.** (1962) M  
8-08060  
*Fish. Newslett. Aust.*, 21 (11) : 21-3  
 The east Australian current

Popular account of structure and behaviour of this current.

- Koh, K. S. & K. H. Cho** (1962) M  
8-08061  
*Bull. Fish. Coll. Pusan Univ.*, 4 (1/2) : 49-58  
 (Current condition of Pusan Harbor). Ni

- Murray, M. T.** (1962) MG  
8-08062  
*Cah. océanogr.*, 14 (10) : 693-702  
 Tide prediction with an electronic digital computer

- Swain, A. & O. F. Newman** (1962) MF  
8-08063  
*Fish. Invest. Lond. (I)*, 6 (3) : 45 p.  
 Hydrographical survey of the river Tyne

An account of the surveys carried out between 1951 and 1957 with special reference to the discharge into the estuary of heated water from a power station.

- Watanabe, N.** (1962) MF  
8-08064  
*Bull. Tokai Fish. Res. Lab.*, 32 : 123-30  
 (On the fall of chlorinity of sea-water due to flowing of land-water). Ni  
 En

Attempt to simplify the equation of continuity and to obtain numerical values for its constants.

- Okubo, K. & T. Okubo** (1962) MF  
8-08065  
*Bull. Tokai Fish. Res. Lab.*, 32 : 131-40

Study on the bioassay method for the evaluation of water pollution.  
 2. Use of the fertilized eggs of sea urchins and bivalves). Ni En

Description of the procedure and presentation of results in comparison with other methods of bioassay.

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**Rivière, A. & S. Vernhet** (1962)

MF

8-08066

*C.R. Acad. Sci., Paris*, 255 (22) : 3013-5

Régime euxinique et sédimentation carbonatée en milieu lagunaire  
(Euxinic regime and carbonated sedimentation in a lagoon environment)

Report of observations on the small ponds produced by the accumulation of *Ruppia* in the littoral lagoons of the French Mediterranean coast.

**Pearson, E. A.** (1961)\*

MF

8-08067

*Engng J., Montreal*, 44 (11) : 63-8

Marine waste disposal

**Richard, C.** (1962)

MF

8-08068

*Eau, Paris*, 49 (6) : 159-64

Hiệp-Hoà. Une curiosité hydrologique du sud Viet-Nam (Hiệp-Hoà).  
An hydrological curiosity in south Viet-Nam)

Short note on the hydrological situation in Hiệp-Hoà (near Saigon) and the characteristics of the western Vaico resulting from the influence of rain water from meteoric origin, brackish water of marine origin and acid water from the reed plain.

**Anon.** 1961)\*

MF

8-08069

*J. Brit. Waterwks Ass.*, 43 (361) : 644-6

Fresh water from the sea—new American plant cuts conversion costs

**Miller, H. J.** (1962)

MF

8-08070

*Wat. & Sewage Wks*, 109 (1) : 44-5

Sea water conversion plant uses Cornell process

Contains data on a plant on Weedon island in Florida.

**R.C.** (1962)

MF

8-08071

*Eau, Paris*, 49 (6) : 158

Application du procédé Cornell pour le dessalement de l'eau de mer (Sea water conversion plant uses Cornell process)

Re 8-08070.

**Gavrilescu, N. & V. Popescu** (1962)

MF

8-08072

*Stud. Cercet. Biol. (anim.)*, 14 (4) : 517-28

Influența vecinătății Mării Negre asupra variațiilor de salinitate ale brațului Sulina (Influence of the proximity of the Black Sea on the variation of salinity of the water of the Sulina arm). Ro Ru Fr

Reports results of observations in 1960-61 and discusses the effect of various physical factors on salinity variation.



- Bainbridge, V.** (1962) MF  
8-08073  
*Bull. Inst. franç. Afr. noire*, 24 (1) : 262-9  
The larvae of *Pellonula vorax* Günther (Clupeidae) in Sierra Leone coastal waters  
The larvae are described and identified.
- Impens, I. & J. Schalck** (1962) MF  
8-08074  
*Meded. Lab. Plantecol. Rlandbhogesch. Ghent*, 3 : 21-55  
(The use of a multiple regression to represent the influence of temperature, wind-velocity, atmosphere pressure, saturation deficit, insolation and radiation on the evaporating power of the air). *Ne*  
BAgr. 26 (10) 78292.
- Balasubrahmanyam, K.** (1961) MF  
8-08075  
*J. zool. Soc. India*, 13 (2) : 166-9  
Studies in the ecology of the Vellar Estuary. 2. Phosphates in the bottom sediments  
Variation with location and time. Co 61-08571.
- Shimizu, C. & H. Matsuoka** (1962) MF  
8-08076  
*Bull. Fac. Fish. Nagasaki*, 12 : 78-82  
(On the organic matter contained in the so-called 'Nuta' (fine attached mud)). *Ni*  
Variations in C and N content of muds.
- Andreae** (1961) F  
8-08077  
*Dtsch. Fisch.-Ztg.*, 8 (8) : 235-8  
Möglichkeiten der Hydrologie zur Unterstützung der Fischerei (Hydrology and its possibilities in supporting fisheries)
- Geyer, R.** (1961) F  
8-08078  
*Dtsch. Fisch.-Ztg.*, 8 (10) : 301-2  
Die neue, verbesserte Farbenskala nach Prof. Dr. Hofer, ein Hilfsmittel zum Schätzen der im Wasser gelösten Sauerstoffmenge (The new, improved colour scale according to Prof. Dr. Hofer, an aid for estimating the amount of oxygen dissolved in water)
- Bolton, P.** (1961)\* F  
8-08079  
*J. Amer. Wat. Wks Ass.*, 53 (10) : 1243-50  
Prevention of water source contamination
- Genet, E. & R. Rohmer** (1962) F  
8-08080  
*Eau, Paris*, 49 (4) : 106-12  
Correction et déminéralisation des eaux par les résines échangeuses d'ions (Correction and demineralisation of water by resin exchanging ions)

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**Genet, E. & R. Rohmer** (1962)

F

8-08081

*Eau, Paris*, 49 (5) : 130-7

Correction et déminéralisation des eaux par les résines échangeuses d'ions  
(Correction and demineralisation of water by resin exchanging ions)

Co 8-08080.

**Devlaminck, F.** (1961)

F

8-08082

*Bull. CEBEDEAU*, 2 (52) : 88-114

Rapport sur une croisière d'étude du Danube (Report on a research cruise on the Danube)

Describes the physical, chemical and biological features of the river and gives an estimation of the degree of pollution.

**Wormser, G.** (1962)

F

8-08083

*Eau, Paris*, 49 (2) : 51-4

Expérience de décontamination de liquides radioactifs par voie biologique  
(Experiments on the decontamination of radioactive liquids by biological treatment)

Report on results using a bacterial bed.

**Taylor, E. W.** (1961)

F

8-08084

*J. Brit. Waterwks Ass.*, 43 (360) : 543-59

Fifty years of water treatment and examination

Reviews the evolution of techniques and methods.

**Anon.** (1961)\*

F

8-08085

*Gaz. off. Pêche*, 4 (107) : 9-10

Études comparées des législations étrangères en matière de pollution des cours d'eau (Comparative study of foreign law on matters concerning the pollution of water)

**Klein, L.** (1961)\*

F

8-08086

*Effl. Wat. Treatm. J.*, 1 (3) : 149-53

Effluent treatment and river pollution—future prospects

**Paris-Teynac, E.-J.** (1962)

F

8-08087

*Bull. Inst. franç. Afr. noire*, 24 (1) : 54-68

Contribution à la connaissance du fleuve Sénégal (Contribution to the knowledge of the Senegal River)

Study on the periodicity of the floods.

# PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

- F  
8-08088
- Bonde, A. N., J. D. Ives & D. B. Lawrence** (1961)  
*Proc. Minn. Acad. Sci.*, 29 : 190-8  
 Ecosystem studies at Cedar Creek natural history area. 3. Water use studies  
 BAgr. 26 (10) 77304.
- F  
8-08089
- Christensen, E. M. & B. F. Harrison** (1960/61)  
*Proc. Utah Acad. Sci.*, 38 : 36-49  
 Ecological study area at Lily Lake in the Uinta Mountains, Utah  
 BAgr. 26 (10) 77307.
- F  
8-08090
- Flaxman, E. M.** (1962)  
*Min. Inter-Ag. Comt. U.S. Pacif. S. West.*, (62-1) : 23-7  
 Relation of upstream sediment production to sediment yield in intermediate sized watersheds  
 BAgr. 26 (10) 78930.
- FG  
8-08091
- U.S. Department of Health Education & Welfare** (1962)  
*Radiol. Hlth Data*, 3 (9) : 311-78  
 Contains section on 'water' tabulating data for the month September 1962 for radioactivity in raw surface waters; also global integrals of fallout.
- FG  
8-08092
- U.S. Department of Health Education & Welfare** (1962)  
*Radiol. Hlth Data*, 3 (5) : 137-71  
 Contains section on 'water' tabulating data for the month May 1962 for radioactivity in raw surface waters; also global integrals of fallout, etc.
- FG  
8-08093
- Fontaine, P.** (1962)  
*Eau, Paris*, 49 (12) : 322-8  
 La sécheresse de l'été 1962—aspects hydrométéorologiques (The drought of summer 1962—hydrometeorological aspects)  
 Contains and discusses the regional climatic characteristics in France and their relation to the atmospheric currents and general meteorological conditions.
- FG  
8-08094
- Anon.** (1962)  
*New Scient.*, 16 (315) : 503  
 On-the-spot water testing  
 Short note. Baird and Tatlock, London, E.C.1, have developed a portable polarograph to test on the bank the amount of dissolved oxygen in the water in ornamental lakes and ponds.

## PLANKTON

Jeuniaux, C. (1962)

M  
8-08095*Cah. Biol. mar.*, 3 : 391-400Digestion de la chitine chez les actiniaires (Coelentérés Anthozoaires)  
(Digestion of chitin by sea-anemones—(Coelenterata Anthozoa). En It

High amounts of chitinases and chitobiasis have been found in the gastro-derm of *Adamsia palliata*, *Anemonia sulcata*, *Anthopleura balli*, *Edwardsia callimorpha*. The chitinolytic activities are as high as those of the gastric mucosa of some insectivorous vertebrates.

de Diaz, E. N. L. (1961)

M  
8-08096*Darwiniana*, 12 (2) : 191-202

(Algae of continental waters of Argentina; phytoplankton of Ibicuy (Entre Rios)). Es

BAgr. 26 (5) 32911.

Hoshiai, T. &amp; M. Kato (1961)

M  
8-08097*Bull. Mar. biol. Sta. Asamushi*, 10 (4) : 221-30

Ecological notes on the diatom community on the sea ice in Antarctica

Vertical distribution of diatoms in coloured ice and quantity of diatoms in seawater below the ice, and species composition of communities in various successions. Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (285).

Kikuchi, S. et al. (1961)

M  
8-08098*Bull. Tohoku Fish. Res. Lab.*, 19 : 164-70

(On the distribution of oyster larvae in Sendai Bay). Ni En

Survey of larvae distribution and environmental conditions.

Odate, S. (1961)

M  
8-08099*Bull. Tohoku Fish. Res. Lab.*, 19 : 98-108

(Study on the larvae of the fishes in the northeastern sea area along the Pacific coast of Japan). Ni En

Distribution in space and time and its relation with water temperature; body-length; size of mature ova.

Satomy, Y. (1961)

M  
8-08100*Inform. Bull. Planktol. Japan*, 7 : 37

(Improved method for permanent preparation of phytoplankton specimens with the aid of a membrane filter). Ni En

Description of the method.



# PLANKTON

- Omori, M.** (1961) M  
8-08101  
*Inform. Bull. Planktol. Japan*, 7 : 34-5  
 (Trial tow with high-speed underway plankton catcher, models 5 and 6).  
*Ni En*

Comparative table of collections made with the two models.

- Motoda, S.** (1961) M  
8-08102  
*Inform. Bull. Planktol. Japan*, 7 : 11-34  
 (Programme of the International Indian Ocean Expedition, particularly on the biological programme). *Ni En*

List of participating organizations, composition of SCOR, its sub-committees, expedition plans and plankton equipment and sampling programme.

- Saijo, Y.** (1961) M  
8-08103  
*Inform. Bull. Planktol. Japan*, 7 : 8-11  
 (Methods of measurement of primary production in the sea by  $^{14}\text{C}$  technique).  
*Ni En*

- Nemoto, T.** (1962) M  
8-08104  
*Inform. Bull. Planktol. Japan*, 8 : 3-5  
 (Some curious diatoms in the sea). *Ni En*

Some taxonomic considerations and discussion of nutritional mechanism.

- Tokioka, T.** (1962) M  
8-08105  
*Inform. Bull. Planktol. Japan*, 8 : 5-11  
 (The outline of the investigations made on chaetognaths of the Indian Ocean). *Ni En*

List of 32 relevant papers and discussion of some aspects of the zoogeography of this group.

- Seno, J.** (1962) M  
8-08106  
*Inform. Bull. Planktol. Japan*, 8 : 12-4  
 (Plankton collected by the 'Umitaka Maru' in the Indian Ocean). *Ni En*

Collections by vertical tow-netting (150-0 m) with 'Marutoku' net and a closing net, as well as surface hauls with larva net in region from off Sunda Strait through Nazareth Bank to Cape Town.

- Motoda, S.** (1962) M  
8-08107  
*Inform. Bull. Planktol. Japan*, 8 : 30-40  
 (Specifications of zooplankton standard net to be used in the International Indian Ocean Expedition, and a design of closing net). *Ni En*

Ill. description of the net and directions for its use, with suggestions for other plankton collecting operations.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

**Motoda, S.** (1962)

M  
8-08108

*Inform. Bull. Planktol. Japan*, 8 : 40-53

(Proposed biological apparatus and methods to be used on Japanese ships in the International Indian Ocean Expedition). Ni En

Methods for visual observations, measurement of primary production and chlorophyll, sampling of microplankton, plankton net hauls, and bacteriological observations; suggested working schedule on board. *Pro forma* record sheets.

**Watson, M.** (1962)

M  
8-08109

*Oceanus*, 9 (1) : 19-20

Tuna larva

An X-ray technique makes it possible to distinguish larva of various tuna species.

**Matsue, Y. et al.** (1962)

M  
8-08110

*Oceanogr. Mag.*, 13 (2) : 137-41

4. Mid-water animals collected on the JEDS-4

Table of numbers of plankton animals collected. Issued also as: *Contr. Jap. Exp. deep Sea*, (32). Ci 8-08045.

**Taga, N. & F. Seki** (1962)

M  
8-08111

*Oceanogr. Mag.*, 13 (2) : 143-7

5. Preliminary report on the microbiological survey made during the fourth cruise of the Japanese Deep Sea Expedition (JEDS-4)

Vertical distribution of heterotrophic microorganisms. Issued also as: *Contr. Jap. Exp. deep Sea*, (33). Ci 8-08110.

**Argua, Y. & M. Monsi** (1962)

M  
8-08112

*J. oceanogr. Soc. Japan*, 18 (2) : 85-94

Primary production in the northwestern part of the Pacific off Honshu, Japan

Distribution of chlorophyll, light-photosynthesis relations, primary production and nutrient supply.

**Repelin, R.** (1962)

M  
8-08113

*Bull. Inst. franç. Afr. noire*, 24 (3) : 664-76

Une nouvelle scyphoméduse bathypélagique: *Atolla russelli*, n. sp. (A new bathypelagic Scyphomedusa: *Atolla russelli*, n. sp.)

Describes a n. sp. collected during a cruise of the 'Ombango' off the Angola coast.

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- McLeod, G. C. & J. Kanwisher** (1962) M  
8-08114  
*Physiol. Plant.*, 15 (3) : 581-6

The quantum efficiency of photosynthesis in ultraviolet light

The marine flagellate, *Dunaliella tertecolata*, and the diatom, *Phaeodactylum tricornutum* were used in experiments to determine whether the near ultraviolet radiations have a deleterious effect on the plant pigments or whether they may be used for photosynthesis in the same way as blue or violet light.

- Lacroix, G.** (1962) M  
8-08115  
*Actualités mar.*, 6 (1) : 11-20

Un aliment controversé: Le zooplancton marin (A controversial food: Marine zooplankton)

Popular review of the possible utilization of plankton as a food source for man.

- Tranter, D. J.** (1962) M  
8-08116  
*Aust. J. Mar. Freshw. Res.*, 13 (2) : 106-42

Zooplankton abundance in Australasian waters

Values for biomass, given as milligrams (wet weight) per cubic metre of seawater filtered, sampled by Clarke-Bumpus sampler, at oceanic and continental-shelf stations. The results are compared with results obtained with other samplers, in other investigations, and in other areas.

- Mito, S.** (1962) M  
8-08117  
*Sci. Bull. Fac. Agric. Kyushu*, 19 (4) : 493-502

(Pelagic fish eggs from Japanese waters.—6. Labrina). *Ni En*

Description and figures of egg development and hatched larvae of 22 spp. belonging to the suborder Labrina. Co 8-05092.

- Krishnamurthy, K.** (1961) M  
8-08118  
*J. zool. Soc. India*, 13 (2) : 180-7

Daily variations in marine plankton from Porto Novo, S. India

Variation from day to day, and between months, and relation between abundance of diatoms and that of copepods.

- Mito, S.** (1962) M  
8-08119  
*Sci. Bull. Fac. Agric. Kyushu*, 19 (4) : 503-6

(Pelagic fish eggs from Japanese waters.—7. Chaetodontina, Balistina and Ostracientina). *Ni En*

Description and figures of eggs and larvae of 5 spp. belonging to the suborders Chaetodontina, Balistina, and Ostracientina. Co 8-08117.

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- Tanaka, O.** (1962) M  
8-08120  
*Publ. Seto Mar. biol. Lab.*, 10 (1) : 35-90  
 The pelagic copepods of the Izu region, middle Japan, systematic account.  
 8. Family Scolecithricidae. Part 2

Ill. description of 26 spp. (of which 8 are new), assigned to 2 genera.  
 Co 61-13249.

- Roosen-Runge, E. C.** (1962) M  
8-08121  
*Pacif. Sci.*, 16 (1) : 15-24  
 On the biology of sexual reproduction of Hydromedusae, genus *Phialidium*  
 Leuckhart

Observations on living and histological material, simple experiments with photostimulus, and sperm counts, made in an attempt to analyse some of the factors that ensure the high reproductive capacity of Hydromedusae.

- Kramp, P. L.** (1962) M  
8-08122  
*Pacif. Sci.*, 16 (1) : 25-9  
 Notes on some eastern Pacific species of *Phialidium* (Leptomedusae)  
 Morphological notes and comparison with other spp.

- Toyosima, T., H. Honda & H. Irie** (1962) M  
8-08123  
*Bull. Fac. Fish. Nagasaki*, 12 : 20-6  
 (A study on the plankton of the Banda Sea and its neighborhood). Ni  
 En

Tabulations of spp. taken and measurements of cell-size of main spp. in each region.

- Manuilova, E. F.** (1962) MF  
8-08124  
*Biull. mosk. Obshch. Ispyt. Prir. (biol.)*, 67 (1) : 128-31  
 (The influence of the blue and green algae on the development of the zoo-plankton). Ru  
 BAgr. 26 (8) 59296.

- Murakami, A.** (1961) MF  
8-08125  
*Inform. Bull. Planktol. Japan*, 7 : 38-9  
 (Plankton studies related to pollution in estuaries and inshore water).  
 Ni En

Plankton observations, additional to normal physical, chemical and plankton observations to be made as a means of estimating degree of pollution.



# PLANKTON

- Rajvalakshmi, T.** (1961) MF  
8-08126  
*J. zool. Soc. India*, 13 (2) : 220-37  
Larval development of *Palaemon lamarrei* H. M. Edw. and *Leander fluminicola* Kemp

Ill. description.

- Fraser, J.** (1962) MF  
8-08127  
London, G. T. Foulis & Co. Ltd., 178 p.  
Nature adrift—The story of marine plankton

Account of the plankton around the British Isles; only passing references are made to the tropics, the ocean depths or higher latitudes. The book begins with an elementary introduction which is followed by a description of plankton apparatus and methods. Five chapters survey the plants and animals of the plankton. Last chapters include descriptions of plankton behaviour and distribution, and of the use of indicator species in interpreting water movements on a wide geographical scale, and the effects of these movements on the fisheries off Scotland and in the North Sea. The last chapter discusses the possible use of plankton as a source of food for man.

- Colman, J. S.** (1962) MF  
8-08128  
*Nature, Lond.*, 196 (4857) : 858  
Scottish and other plankton

Re 8-08127.

- Satomi, Y.** (1961) F  
8-08129  
*Bull. Freshw. Fish. Res. Lab., Tokyo*, 11 (2) : 1-9

Untersuchungen über die Remineralisation des Phosphors und Stickstoffs im Phytoplankton, insbesondere in Bezug auf Alkalinität der Medien und andere Milieufaktoren (Studies of the remineralisation of phosphorus and nitrogen in phytoplankton, especially in relation to the alkalinity of the medium and other factors of the environment). *Ni De*

Experiments with pure cultures of *Scenedesmus obliquus*. Measurement of autolytic and respiratory remineralization at various alkalinities, with and without aeration.

- Rajasekarasetty, M. R. & A. R. K. Bai** (1961) F  
8-08130  
*J. zool. Soc. India*, 13 (3) : 238-9

On the occurrence of a new species of hypotrichous ciliate *Gastrostyla Engelmann*

Ill. description of *Gastrostyla hebbalica* n. sp.

**Vuxanovici, A. (1962)**F  
8-08131*Stud. Cercet. Biol. (anim.)*, 14 (3) : 331-49

Contribuții la sistematica ciliatelor (nota 2.) (Contribution to the systematics of Ciliata (note 2.)). Ro Ru Fr

Co 62-06452. Describes a new genus *FUNDENIA* and n. spp. of *Spathidium*, *Lionotus*, *Dileptus*, *Nassula*, *Ophryoglena*, *Paramecium*, *Colpidium*, *Lembus*, *Cyclidium*, and *Metopus*.**Vuxanovici, A. (1962)**F  
8-08132*Stud. Cercet. Biol. (anim.)*, 14 (4) : 549-73

Contribuții la sistematica ciliatelor (nota 3.) (Contribution to the systematics of Ciliata (note 3.)). Ro Ru Fr

Co 62-06452 and 8-08131. Rediscusses and gives drawings of species collected, including various new species.

**Willén, T. (1962)**F  
8-08133*Oikos, Suppl.* 5 : 156 p.

The Utäl Lake chain central Sweden and its phytoplankton

Aims to give a general description of the lakes; to follow the seasonal distribution of phytoplankton, recording and counting the most common algae; to illustrate the specific conditions prevailing in the recently isolated lakes, comparing these with true freshwater lakes, and to give some physical-chemical and other data to explain the prevailing conditions.

**Baily, I. A. E. (1962)**F  
8-08134*Aust. J. Mar. Freshw. Res.*, 13 (2) : 143-97Ecological studies on New Zealand lacustrine zooplankton with special reference to *Boeckella propinqua* Sars (Copepoda: Calanoida)Study of zooplankton of a small, warm monomictic, closed, alkaline lake on an off-shore island of North Island, New Zealand; morphometric, thermometric and chemical aspects of the lake; vertical distribution of zooplankton; size composition, sex ratio and other aspects of *Boeckella* population.

## BENTHOS

**Bang, F. (1962)**M  
8-08135*Cah. Biol. mar.*, 3 : 363-74

Studies on sipunculid blood: immunologic properties of coelomic fluid and morphology of 'urn cells'. De

*Phascolosoma (Goldfingia) gouldii* and *Sipunculus nudus* coelomic fluid is sterile and capable of destroying massive concentrations of bacteria. New information on the structure of the bicellular urns are presented.

- Bobin, G. & M. Prenant** (1962) M  
8-08136  
*Cah. Biol. mar.*, 3 : 375-89

Les espèces françaises du genre *Conopeum* Gray. (Bryozoaires Chilostomes)  
(The French species of the genus *Conopeum* Gray (Bryozoa Chilostomata)).  
En De

Presents morphological arguments to distinguish *M. seurati* from *Conopeum reticulum* from Channel coasts.

- Stoll, C.** (1962) M  
8-08137  
*Cah. Biol. mar.*, 3 : 401-15

Cycle évolutif de *Paragnathia formica* (Hesse) (Isopode-Gnathiidae)  
(Evolutive cycle of *Paragnathia formica*—Isopoda-Gnathiidae). En De

Seasonal rhythm of female metamorphosis and the differences between male and female biological cycle depends on the temperature variations.

- Levi, C.** (1963) M  
8-08138  
*C.R. Acad. Sci., Paris*, 256 (2) : 497-8

Sclérobastes et spiculogenèse chez une éponge siliceuse (Scleroblasts and spiculogenesis in a silicious sponge)

Preliminary note describing the process in *Mycale contarenii*.

- Streiff, W. & A. Peyre** (1963) M  
8-08139  
*C.R. Acad. Sci., Paris*, 256 (1) : 292-4

Survie, en culture *in vitro*, d'organes de *Calyptraea sinensis* L. (Mollusque prosobranch) (Survival, in *in vitro* culture, of organs of *Calyptraea sinensis* L. (Mollusca Prosobranchiata))

Preliminary note, reporting results of experiments.

- Baardsath, E. & B. Grenager** (1961) M  
8-08140  
*Rapp. norsk Inst. Tang- o. Tareforsk.* : 25-39

A method of assessing seaweed quantities

BAgr. 26 (8) 59226.

- Dau, L.** (1960) M  
8-08141  
*Arg. Mus. nac., Rio de J.*, 50 : 79-133

(Microlimates of the restingas of southeastern Brazil. 1. Inland restinga of Cabo Frio). Pr En

BAgr. 26 (8) 59247.

- Ardré, F.** (1960) M  
8-08142  
*Rev. gén. Bot.*, 77 (798) : 541-9

(Some dermocaroid Cyanophyceae of the Portuguese coast). Fr

BAgr. 26 (5) 32901.

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**Chiang, Y. M.** (1960)

M

8-08143

*Taiwania*, 7 : 51-75

Marine algae of northern Taiwan (Cyanophyta, Chlorophyta, Phaeophyta)

BAgr. 26 (5) 32907.

**Taylor, W. R.** (1962)

M

8-08144

*Contr. U.S. nat. Herb.*, 36 (2) : 43-62

Marine algae from the tropical Atlantic Ocean. 5. Algae from the Lesser Antilles

BAgr. 26 (5) 32935.

**Takeuchi, Y.** (1962)

M

8-08145

*Bull. Mar. biol. Sta. Asamushi*, 11 (1) : 41-51

Vascular flora of the vicinity of the Asamushi Marine Biological Station, Aomori Prefecture. (1) List of vascular plants collected at Yunoshima

List of 252 spp. Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (291).

**Kato, M. et al.** (1962)

M

8-08146

*Bull. Mar. biol. Sta. Asamushi*, 11 (1) : 31-6

Interspecific relation in the colony formation among some hydrozoan species

Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (289).

**Fukushi, T.** (1962)

M

8-08147

*Bull. Mar. biol. Sta. Asamushi*, 11 (1) : 21-30

The fates of isolated blastoderm cells of sea urchin blastulae and gastrulae inserted into the blastocoel

Developmental potencies of blastoderm cells, such as primary mesenchyme, endodermal, ectodermal, in the blastocoel of animal half larvae. Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (288).

**Yamamoto, G. & T. Habe** (1962)

M

8-08148

*Bull. Mar. biol. Sta. Asamushi*, 11 (1) : 1-20

Fauna of shell-bearing mollusks in Mutsu Bay; Scaphopoda and Gastropoda (1)

Synonymy, locality, distribution and habitat for 44 spp. with some morphological notes and ill. Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (287).



# BENTHOS

- Kurogi, M.** (1961) M  
8-08149  
*Bull. Tohoku Fish. Res. Lab.*, 18 : 1-115  
 (Species of cultivation porphyras and their life histories.—Study of the life history of *Porphyras* 2.—). *Ni En*

Diagnosis, morphology, ecology and culture of 4 spp. with comparative notes and key.

- Kikuchi, S.** (1961) M  
8-08150  
*Bull. Tohoku Fish. Res. Lab.*, 19 : 154-63  
 (Influences of water-temperature and salinity on the development of oyster in Matsushima Bay). *Ni En*

Regression of development rate on temperature and salinity is used to 'age' larvae and hence estimate spawning date.

- Kikuchi, S. & S. Tanita** (1961) M  
8-08151  
*Bull. Tohoku Fish. Res. Lab.*, 19 : 149-53  
 (On the relation between the lapse days of collectors and the adhesive-rate of oyster-spats). *Ni En*

Examination of effect of marine-fouling on spat fall.

- Tanita, S. & S. Kikuchi** (1961) M  
8-08152  
*Bull. Tohoku Fish. Res. Lab.*, 19 : 142-8  
 (Studies on the organisms attaching to raft-cultured oysters. 3. Effects on the growth and fattening of oysters). *Ni En*

- Kanno, H. & S. Tanita** (1961) M  
8-08153  
*Bull. Tohoku Fish. Res. Lab.*, 19 : 135-41  
 (Studies on *Chlamys farreri nipponensis* Kuroda. 2. Seasonal change of the gonads). *Ni En*

Ill. histological observations.

- Marumo, R.** (1961) M  
8-08154  
*Inform. Bull. Planktol. Japan*, 7 : 1-7  
 (Research on deep-sea animals by the 'Ryofu Maru'). *Ni En*

Description of gear; rectangular dredge, Niino dredge, beam trawl, triangular mid-water plankton net, and a 130 cm conical plankton net.

- Marumo, R.** (1962) M  
8-08155  
*Inform. Bull. Planktol. Japan*, 8 : 14-22  
 (Research on deep-sea animals by the 'Ryofu Maru'). *Ni En*

Collections by 130 cm conical plankton net, beam trawl, rectangular dredge and bacteriological water samplers, in area adjacent to Japan Trench.

- Miyake, S.** (1961) M  
8-08156  
*J. Fac. Agric. Kyushu*, 11 (3) : 237-47  
 Three new species of the anomura from Japan (Crustacea, Decapoda)

Ill. description of *Uroptychus kudayagi*, *Porcellana habei*, and *Paguristes japonicus*, all new species. Issued also as: *Contr. Dep. Fish. Kyushu Univ.*, (303).

- Tsujii, T.** (1960) M  
8-08157  
*J. Fac. Fish. Univ. Mie*, 5 (1) : 1-70  
 Studies on the mechanism of shell and pearl formation in Mollusca

Morphology of mantle and pearl-sac, cytology of mantle cells during shell regeneration; histochemistry of calcium and carbonic anhydrase, of polysaccharides amino acids, proteins and nucleic acids in pearl sac, and of the activity of alkaline phosphatase.

- Tanaka, O.** (1961) M  
8-08158  
*J. Fac. Agric. Kyushu*, 11 (3) : 249-73  
 On copepods associated with marine pelecypods in Kyushu

Description of *Mycicola ostreae* (Hoshina & Sugiura), *Ostrincola koe*, *Ostrincola japonica*, *Conchylurus quintus*, *Lichomolgus inflatus*, *Modiolicola bifida*, and *Anthessius pectinis*, of which all save the first are new species.

- Suyehiro, Y. et al.** (1962) M  
8-08159  
*Oceanogr. Mag.*, 13 (2) : 149-53  
 6. A brief note on the benthic animals on the fourth cruise of the Japanese Expedition of Deep Seas (JEDS-4)

Table of numbers of benthic animals collected. Issued also as: *Contr. Jap. Exp. deep Sea*, (34). Ci 8-08111.

- Koval'skii, V. V. & L. T. Rezaeva** (1963) M  
8-08160  
*Dokl. Akad. Nauk SSSR*, 148 (1) : 238-40  
 Soderzhanie vanadiia v krovi *Ascidella aspersa* (Contents of vanadium in the blood of *Ascidella aspersa*)

- Okutani, T.** (1962) M  
8-08161  
*Bull. Tokai Fish. Res. Lab.*, 32 : 1-40

Report on the archibenthal and abyssal lamellibranchiate Mollusca mainly collected from Sagami Bay and adjacent waters by the R.V. 'Soyo-Maru' during the years 1955-1960. Ni

Ill. list of 65 spp. (of which 21 are described as new spp. and 2 as new subsp.) with notes on locality and distribution, morphological notes of new spp., and keys for Japanese *Thestyloda* and for *Calypptogena*.

- M  
8-08162
- Okutani, T.** (1962)  
*Bull. Tokai Fish. Res. Lab.*, 32 : 41-7  
 Diet of the common squid, *Ommastrephes sloani pacificus* landed around Ito Port, Shizuoka Prefecture. Ni

Volume and composition of stomach content.

- M  
8-08163
- Jouin, C.** (1962)  
*C.R. Acad. Sci., Paris*, 255 (22) : 3065-7  
 Le développement larvaire de *Protodrilus chaetifer* Remane (Archianellides)  
 (The larval development of *Protodrilus chaetifer* Remane (Archianellidae))

Observations on larval material collected at Roscoff.

- M  
8-08164
- Demeusy, N.** (1962)  
*C.R. Acad. Sci., Paris*, 255 (22) : 3062-4

Observations sur la maturation ovarienne du crabe *Carcinus maenas* L. après ablation des glandes de mue chez les femelles adultes. Premiers résultats (Observations on the maturing of eggs of the crab *Carcinus maenas* L. after removal of the molting glands in the adult female. Preliminary results)

- M  
8-08165
- L.B.** (1962)  
*Bull. Cent. Étud. Rech. sci., Biarritz*, 4 (1) : 95  
*Sargassum vulgare* var. *flavifolium* sur la côte basque (*Sargassum vulgare* var. *flavifolium* on the Basque coast)

Short informative note.

- M  
8-08166
- Bertrand, H.** (1962)  
*Bull. Inst. franç. Afr. noire (A)*, 24 (4) : 1065-114

Contribution à l'étude des premiers états des coléoptères aquatiques de la région éthiopienne (4<sup>e</sup> note). Famille: Hydrophilidae s. lat. (*Palpicornia* auct.) (Contribution to the study of the first stages of aquatic coleopters of the Ethiopian region (4th note). Family: Hydrophilidae s. lat. (*Palpicornia* auct.))

Ci 8-08234.

- M  
8-08167
- Anon.** (1962)  
*France Pêche*, 7 (68) : 85  
 Fiche technique de la pieuvre ou poulpe et des céphalopodes (Fishery card on the *Octopus vulgaris* and Cephalopoda)

Detachable cards, ill., giving biology, habitat, fishing, catch, commercial use of *Octopus vulgaris* and Cephalopoda.

**Anon.** (1962)M  
8-08168*France Pêche*, 7 (67) : 45-6

Fiche technique des moules et mytiliculture (Fishery card on mussels and mytiliculture)

Detachable cards, ill., giving biology, habitat, fishing, catch, commercial use of mussels and mytiliculture.

**Lancelot, A.** (1961)M  
8-08169*Bull. Cent. Étud. Rech. sci., Biarritz*, 3 (4) : 505-12

Les algues mélobésiées de Biarritz (The melobesian algae of Biarritz)

Records the presence of spp. of *Lithophyllum*, *Dermatolithum*, *Mesophyllum*, *Lithothamnium*, *Melobesia* and *Epilithum*.**Ardre, F.** (1961)M  
8-08170*Bull. Cent. Étud. Rech. sci., Biarritz*, 3 (4) : 489-94Remarques sur les *Codium* de la Côte Basque (Comments on the *Codium* of the Basque Coast)Comparative study of specimens collected in the area. Describes *Codium tomentosum* Stackhouse var. *mucronatum* (Hamel).**Cribb, A. B.** (1961)M  
8-08171*Pap. Dep. Bot. Univ. Qd.*, 4 (5) : 51-9

Some marine algae from Thursday Island and surrounding areas

BAgr. 26 (10) 77004.

**Fitzpatrick, J. F., Jr.** (1963)M  
8-08172*Tulane Stud. Zool.*, 10 (1) : 57-79Geographic variation in the crawfish *Faxonella clypeata* (Hay) with the definition and defense of the genus *Faxonella* Creaser (Decapoda, Astacidae)Investigation of geographic variation and study of related species. The two species currently assigned to subgenus *Faxonella* of a genus *Orconectes* constitute a distinct group worthy of generic distinction. Writer proposed that subgenus be elevated to full generic status. New genus was defined and defended. Range limits of the species discussed.**Maeshige, S.** (1962)M  
8-08173*Bull. Jap. Soc. sci. Fish.*, 28 (6) : 606-9Chemical studies on the green alga, *Monostroma nitidum* Wittrock. 2. Lowmolecular carbohydrates in the alga

Methods of extraction of sugars and clarification of the extract; identification of sugars by paper chromatography and determination of sugar content. Co 8-09124.



- Kane, J. E.** (1962) M  
8-08174  
*N.Z. J. Geol. Geophys.*, 5 (3) : 295-315  
 Amphipoda from waters south of New Zealand

Identification of 23 spp. from 10 families of Hyperiidea and 1 of Gammaridea, and plots of their distribution; 1 sp. a new record for these waters. Zoo-geographic aspects are discussed.

- Yatsukuka, K.** (1962) M  
8-08175  
*Rep. Usa Mar. biol. Sta.*, 9 (1) : 1-88  
 (Studies on the artificial rearing of the larval Brachyura, especially of the larval blue-crab, *Neptunus pelagicus* Linnaeus). *Ni En*

Determination of spawning and hatching seasons and description of development and growth of zoea larvae, including relation of development with temperature, salinity and oxygen. Photo-taxis of these larvae, their diet and feeding habits. Moulting.

- Utinomi, H.** (1962) M  
8-08176  
*Publ. Seto Mar. biol. Lab.*, 10 (1) : 105-8  
 Preliminary list of octocorals of Sagami Bay deposited in the biological laboratory of the Imperial Household

List of 63 spp. Issued also as: *Contr. Seto Mar. biol. Lab.*, (382).

- Rajabai, K. G.** (1961) M  
8-08177  
*J. zool. Soc. India*, 13 (2) : 154-65  
 Studies on the larval development of Brachyura. 7. Early development of *Metopograpsus messor* (Forsk.), *Plagusia depressa squamosa* (Herbst), *Metasesarma rousseauxii* A. M. Edwards and *Sesarma tetragonum* (Fabricius) of the family Grapsidae

Ill. description of zoeal stages. CR 60-2472.

- Sankolli, K. N.** (1961) M  
8-08178  
*J. zool. Soc. India*, 13 (2) : 136-42  
 On a new species of hermit crab *Pagurus kulkarnii* sp. nov. (Anomura: Paguridae)

Ill. morphological description.

- Tokioka, T.** (1962) M  
8-08179  
*Publ. Seto Mar. biol. Lab.*, 10 (1) : 1-20  
 Contributions to Japanese ascidian fauna. 18. Ascidians from Sado Island and some records from Sagami Bay

Ill. description of 21 spp. of which one is new. Issued also as: *Contr. Seto Mar. biol. Lab.*, (379). Co 61-01617.

**Utinomi, H.** (1962)M  
8-08180*Publ. Seto Mar. biol. Lab.*, 10 (1) : 91-104

Pycnogonida of Sagami Bay—supplement

Ill. list of 16 spp. assigned to 9 genera; morphological notes of some of these, and detailed description of the one that is new. Issued also as: *Contr. Seto Mar. biol. Lab.*, (381).

**Sakai, K.** (1962)M  
8-08181*Publ. Seto Mar. biol. Lab.*, 10 (1) : 28-34Systematic studies on Thalassinidea. 1. *Laomedea astacina* de Haan

Ill. description. Issued also as: *Contr. zool. Lab. Kyushu Fac. Agric.*, (304).

**Tokioka, T.** (1962)M  
8-08182*Publ. Seto Mar. biol. Lab.*, 10 (1) : 21-5Record of a giant egg mass of *Melo ducale* (Lamarck) from the Arafura Sea

Ill. description. Issued also as: *Contr. Seto Mar. biol. Lab.*, (380).

**Uchio, T.** (1962)M  
8-08183*Publ. Seto Mar. biol. Lab.*, 10 (1) : 133-44

Recent Foraminifera thanatocoenoses of beach and nearshore sediments along the coast of Wakayama-ken, Japan

Table of occurrences of benthonic Foraminifera as percentage of total (living plus dead) population.

**Harada, E.** (1962)M  
8-08184*Publ. Seto Mar. biol. Lab.*, 10 (1) : 109-32On the genus *Scyllarus* (Crustacea Decapoda: Reptantia) from Japan

Ill. description of 4 spp. occurring in Japanese waters, of which 2 are new, and notes on 3 others, also occurring in Japanese waters; key to these spp. Issued also as: *Contr. Seto Mar. biol. Lab.*, (383).

**Yoo, S. K.** (1962)M  
8-08185*Bull. Fish. Coll. Pusan Univ.*, 4 (1/2) : 11-9

(Studies on the food of bivalves in Yong-Ho Inlet of Soo-Young Bay).  
Ni En

Notes on spp. of plankton found in stomach of Mollusca and the relation between composition of net-collected plankton and that found in the stomachs.

**Kurata, H.** (1962)M  
8-08186*Bull. Hokkaido Fish. Res. Lab.*, 24 : 1-115

Studies on the age and growth of Crustacea

Data are drawn from original experiments and from literature. Increase in linear dimension and weight for many spp.; derivation of a growth equation. Frequency of moulting, effects of environment on growth, and estimation of age and growth of *Porcellio scabar* as example.

- Takeuchi, I.** (1962) M  
8-08187  
*Bull. Hokkaido Fish. Res. Lab.*, 24 : 163-70  
 (On the distribution of zoea larvae of king crab, *Paralithodes camtschatica*, in the southeastern Bering Sea in 1960). *Ni En*

Variation between night and day hauls.

- Serene, R.** (1962) M  
8-08188  
*Pacif. Sci.*, 16 (1) : 30-41  
 Species of *Cryptochirus* of Edmondson 1933 (Haplocarcinidae)

Review of the status of *Cryptochirus rugosus*, *C. minutus*, *C. pyriformis* and *C. pacificus*, described by Edmondson in 1933, with reference to the separation between the genus *Cryptochirus* and the genus *Troglocarcinus* proposed by Fize and Serene (1957).

- Gilbert, W. J.** (1962) M  
8-08189  
*Pacif. Sci.*, 16 (1) : 135-44  
 Contribution to the marine Chlorophyta of Hawaii, 1.

Annotated list of 14 spp.

- Kazihara, T.** (1962) M  
8-08190  
*Bull. Fac. Fish. Nagasaki*, 12 : 33-40  
 (On the growth of *Styela plicata* Lesueur). *Ni En*

Length/weight and length/breadth relations, growth rates for these dimensions and their seasonal variation, survival and population growth in weight.

- Toyosima, T. & H. Irie** (1962) M  
8-08191  
*Bull. Fac. Fish. Nagasaki*, 12 : 12-9  
 (Studies on attaching of barnacles in shallow waters). *Ni En*

Observations in Nagasaki Bay, 1960, of time of attachment, temperature and depth at which attachment takes place, substrate material and colour.

- Kazikara, T.** (1962) M  
8-08192  
*Bull. Fac. Fish. Nagasaki*, 12 : 41-4  
 (Seasonal settlements of *Styela plicata* Lesueur). *Ni En*

Spawning period, establishment of summer and autumn generations, growth rates of these generations, depth of good attachment and growth.

- Yasuda, M., T. Ueda & Y. Yamazoe** (1962) M  
8-08193  
*Bull. Fac. Fish. Nagasaki*, 12 : 27-32  
 Studies on the quality of asakusanori (*Porphyra tenera*) 3. Fluorometric analysis of phykoerythrin by fluorospectro-photometer). *Ni*

Co 61-08298.

**Tsuruga, H. et al.** (1962)

M  
8-08194

*Bull. Naikai Fish. Res. Lab.*, 18 : 11-3

(Biochemical investigations of the marine algae. 4. On the environmental conditions and chemical constituents of the laver (*Porphyra tenera*)). Ni En

Issued also as: *Contr. Naikai Fish. Res. Lab.*, (100). Ci 61-01466, Ci 61-01465.

**Hayashi, T. & Y. Yamaguchi** (1962)

M  
8-08195

*Bull. Naikai Fish. Res. Lab.*, 15 : 1-113

(Study on food niches of the benthic piscivores). Ni En

Study of benthic communities of the Japanese Inland Sea and adjacent continental shelf of the Pacific coast. Methods of collection and handling materials. Size relations between predator and prey.

**Arai, K., T. Furukawa & T. Saito** (1961)

M  
8-08196

*Bull. Fac. Fish. Hokkaido*, 12 (1) : 66-70

(Acid-soluble nucleotides in muscle of marine invertebrates. 3. Acid-soluble nucleotides in foot and adductor muscles of seashells). Ni En

Changes in these compounds in cold-stored material. Co 61-09282.

**Fukushima, H.** (1961)

M  
8-08197

*Bull. Mar. biol. Sta. Asamushi*, 10 (4) : 237-40

The brief notes on the diatoms vegetation at the Prince Olav coast, Antarctica

Taxonomic outline of the flora.

**Fukushima, K.** (1962)

M  
8-08198

*Bull. Jap. Soc. sci. Fish.*, 28 (9) : 909-13

(Polarographic studies on the molluscan meat. 8. Studies on the distribution of homarine (N-methyl picolinic acid betaine) in some molluscan and crustacean tissues). Ni En

Co 8-11186.

**Raikov, I. B.** (1962)

MF  
8-08199

*Cah. Biol. mar.*, 3 : 325-61

Les Ciliés mésopsammiques du littoral de la Mer Blanche (U.R.S.S.) avec une description de quelques espèces nouvelles ou peu connues (The mesopsammon Ciliata from the littoral of the White Sea (USSR) with a description of some new or little known species). En Ru

59 spp. and 2 varieties of ciliates were registered. Descriptions of all the new forms (*Tracheloraphis kahli* s. sp., *Tr. discolor* n. sp., *Tr. vermiformis* n. sp., *Tr. drachi* f. *bimicronucleata* forma nov., *Tr. striatus* n. sp., *Trachelonema oligostriata* n. sp., *Tr. lanceolata* n. sp., *Kentrophoros latum* n. sp., *K. uninucleatum* n. sp. and *Geleia murmanica* n. sp.) as well as of *Tracheloraphis phoenicopterus* (Cohn), *Tr. margaritatus* (Kahl) and *Tr. dogieli* (Raikov) are given. Ecological analysis of the fauna.



**Chapman, V. J. (1959)**

*Proc. Int. bot. Congr.*, 9 (1) : 180-3

Factors controlling algal zonation

BAgr. 26 (7) 50577.

MF  
8-08200

**Lejuez, R. (1962)**

*C.R. Acad. Sci., Paris*, 255 (22) : 3034-6

Définition de deux sous-espèces chez l'isopode flabellifère *Sphaeroma hookeri* Leach (Definition of two sub-species in the flabellifer isopod *Sphaeroma hookeri* Leach)

MF  
8-08201

Describes *S. hookeri hookeri* and *S. hookeri mediterranea* from the brackish water lagoons of Rousillon (French Mediterranean coast).

**Fischer-Piette, E. & J. Seoane-Camba (1962)**

*Bull. Inst. océanogr. Monaco*, (1244) : 36 p.

Ecologie de la ria-type: la Ria del Barquero (Ecology of the "ria-type": the Ria del Barquero). Es En

MF  
8-08202

Supplies some information on environmental factors and describes the sessile bios from the coast to the open sea, endeavouring particularly to determine the order of apparition of the species.

**Anon. (1962)**

*New Scient.*, 16 (315) : 505

Canada. Attack on algae

MF  
8-08203

Short note on a new herbicide called Aqualine developed by the Water Resources Commission of Ontario, in conjunction with the Shell Oil Company of Canada. It can be "seeded" in the form of pellets from aircraft. Successful application depends on the water being in a state of tranquility.

**Poisson, R. A. (1960)**

*Bull. Inst. franç. Afr. noire*, 22 (3) : 984-1007

Mission de M. H. Bertrand (1956-57) en Afrique occidentale et en Afrique équatoriale. Hydrocorises (Mission of M. H. Bertrand (1956-57) in western and equatorial Africa. Hidrocharises)

MF  
8-08204

**Ardré, F. (1961)**

*Bull. Cent. Étud. Rech. sci., Biarritz*, 3 (4) : 495-504

Algues marines rares ou nouvelles pour la Côte Basque française (Marine algae rare or new to the French Basque Coast)

MF  
8-08205

Lists some spp. of Cyanophyceae, Chlorophyceae, Xanthophyceae, Phaeophyceae, Rhodophyceae with systematic and ecological remarks.

MF

8-08206

**Fay, P. & G. E. Fogg** (1962)*Arch. Mikrobiol.*, 42 (3) : 310-21Studies on nitrogen fixation by blue-green algae. 3. Growth and nitrogen fixation in *Chlorogloea fritschii* Mitra

BAgr. 26 (10) 77526.

MF

8-08207

**McMullan, J. L.** (1962)*J. Dep. Agric. W. Aust.*, (Ser. 4), 3 (4) : 252-5Stilling coastal sand drifts with marram grass (*Ammophila arenaria*)

BAgr. 26 (10) 78943.

MF

8-08208

**Fairbanks, L. D.** (1963)*Tulane Stud. Zool.*, 10 (1) : 3-47Biodemographic studies of the clam *Rangia cuneata* Gray

Pelecypod mollusk commonly inhabiting brackish water coastal areas of northern Gulf of Mexico, is known from Neocene fossiliferous deposits of the Mississippi embayment. Investigation to determine pertinent physical and biological factors habitat concerning population density, sizes of individuals, and reproductive cycle. Two areas, ten miles apart in lake Pontchartrain, Louisiana, were selected for investigation from Feb. 1957 to Sep. 1958. Temperature, salinity, total phosphorus, phytoplankton pigment concentration, and oxidizable organic matter in solution were estimated. Population densities by size classes of adults were estimated for the two areas.

MF

8-08209

**Enomoto, Y.** (1961)*Bull. Jap. Soc. sci. Fish.*, 27 (12) : 1047-51On the bacteria-free culture of *Melosira nummuloidea* (Dillw.) C. A. Agardh

Culture medium and methods, and use of antibiotics.

F

8-08210

**Anon.** (1959)*J. agric. Fd Chem.*, 7 : 600-4

Food space age problem

Briefly describes closed ecological system as balance between man and a photosynthetic plant where the plant should provide: gas exchange between itself and the spaceman; means of consuming human wastes; and food.

F

8-08211

**Balesdent-Marquet, M.-L.** (1963)*C.R. Acad. Sci., Paris*, 256 (1) : 262-4

Répartition des cellules de Zenker et détermination spécifique de *Asellus* (*Asellus*) *aquaticus* Linné sensu Racovitza et *Asellus* (*Proasellus*) *meridianus* Racovitza (Distribution of the Zenker's cells and specific determination of *Asellus* (*Asellus*) *aquaticus* Linné sensu Racovitza and *Asellus* (*Proasellus*) *meridianus* Racovitza)

Preliminary note based on material collected in Lorraine (France).

- F  
8-08212
- Asaul, Z. I.** (1961)  
*Ukr. bot. Zh.*, 18 (6) : 56-63  
(Study of seasonal dynamics of development of Euglenidae algae in ponds of the west Ukrainian Polesye). *Uk En*  
BAgr. 26 (8) 59227.
- F  
8-08213
- Auyang, T. S. C.** (1962)  
*Rhodora*, 64 (757) : 49-59  
A survey of the algae of lake Quinsigamond  
BAgr. 26 (7) 50108.
- F  
8-08214
- Bell, T. N.** (1961)  
*Proc. S. Dak. Acad. Sci.*, 40 : 125-31  
Algal flora of the Gavins Point Reservoir  
BAgr. 26 (7) 50109.
- F  
8-08215
- Bourrelly, P.** (1961)  
*Bull. Micros. Appl.*, (2) 11 (5) : 1s-26s  
(Practical introduction of the systematics of the sweet water algae. 8. Chlorococcales). *Fr*  
BAgr. 26 (7) 50110.
- F  
8-08216
- Gashwiler, K. & J. D. Dodd** (1961)  
*Proc. Iowa Acad. Sci.*, 68 : 129-31  
Algae from the warm pools of Silver Lake fen  
BAgr. 26 (7) 50112.
- F  
8-08217
- Bourrelly, P.** (1959)  
*Proc. Int. bot. Congr.*, 9 (1) : 198-201  
(The big ecological problem in the algology of fresh water). *Fr*  
BAgr. 26 (7) 50574.
- F  
8-08218
- Prescott, G. W.** (1959)  
*Proc. Int. bot. Congr.*, 9 (1) : 201-7  
Ecology of freshwater algae in the Arctic  
BAgr. 26 (7) 50622.
- F  
8-08219
- Bourrelly, P.** (1961)  
*Bull. Res. Coun. Israel (B)*, 10 (D) (1/4) : 9-14  
(Some algae from fresh water in the environs of Konakry). *Fr*  
BAgr. 26 (5) 32905.

**Bourelly, P.** (1961)

*Rev. algol.*, 6 (1) : 57-68

(Some rare or new algae from lake of Grand-Lieu). *Fr*

BAgr. 26 (5) 32906.

F

8-08220

**Ganguly, D. N. & B. Mitra** (1961)

*Indian Agric.*, 5 (2) : 184-8

Observation on the fish-fry destroying capacity of certain aquatic insects and the suggestion for their eradication

F

8-08221

TA k474. Field observations and laboratory experiments on larvae of Dytiscidae (*Dytiscus* and *Cybister*) and adults of Nepidae (*Nepa* and *Ranatra*) were carried out in Calcutta. Presence of large populations of insects in nursery tanks must be detrimental. Limited populations are not very harmful and may act as natural means to prevent congestion. Chemical control is not practicable; mechanical eradication with small-mesh nets is suggested.

**Nose, T.** (1961)

*Bull. Freshw. Fish. Res. Lab., Tokyo*, 11 (2) : 11-8

(On the emerging behaviour *Chironomus plumosus* larvae). *Ni En*

F

8-08222

Description of apparatus and method for counting larvae; observations on emergence, growth, swimming activity.

**Lak, G. Ts.** (1963)

*Dokl. Akad. Nauk SSSR*, 148 (1) : 170-1

Diatomovye vodorosli ozernykh otlozhenii Karelii (Diatom algae in lacustrine deposits of Karelia)

F

8-08223

**Zahnd, J. P. & A. Porte** (1962)

*C.R. Acad. Sci., Paris*, 255 (22) : 3037-8

Sur un aspect particulier du réticulum cytoplasmique et ses rapports avec le chondriome dans les très jeunes oöcytes d'un Poecilidé: *Mollienesia sphenops* (On a special aspect of the cytoplasmic reticulum and its relation to the chondriosoma in the young oocytes of a Poeciliidae: *Mollienesia sphenops*)

F

8-08224

**Oltean, M. & V. Zanoschi** (1962)

*Stud. Cercet. Biol. (veg.)*, 14 (4) : 423-8

Observatii asupra diatomeelor din mlastinile eutrofe din bazinul Bilborului (Some observations on the diatoms from the eutrophic marshes of the Bilbor basin). *Ro Ru Fr*

F

8-08225

Records 108 taxons, including 8 n. spp.

**Reid, G. W. & J. R. Assenzo** (1961)\*

*Wat. & Sewage Wks*, 103 (6) : 248-50

Culture and harvest of attached algae grown on domestic sewage—part 1

F

8-08226



- Anon.** (1962) F  
8-08227  
*Eau, Paris*, 49 (5) : 141  
 Revue des livres. Bestrijding der overvloedige Water-planten (Book reviews. Control of invading aquatic weeds). *Ne*

Re 61-13551.

- Motaş, C. & F. Botea** (1962) F  
8-08228  
*Stud. Cercet. Biol. (anim.)*, 14 (4) : 529-37  
 Cercetări asupra faunei freatice din valea Prahovei (Research on the interstitial fauna of the Prahova valley). *Ro Ru Fr*

List of Oligochaeta, Copepoda, Bathynellacea, Cladocera, Amphipoda, Hydrachnellae, Ephemera and Diptera collected in 1960-61 and ecological remarks.

- Botea, F.** (1962) F  
8-08229  
*Stud. Cercet. Biol. (anim.)*, 14 (4) : 539-43  
 Oligochete limicole din freaticul văii Prahovei (Fresh water Oligochaeta from the interstitial fauna of the Prahova valley). *Ro Ru Fr*

Records 14 species of the families Naididae, Pristinidae, Enchytraeidae, Tubificidae, Lumbriculidae, Haplotaxidae and Lumbricidae collected in 1960-61.

- Botea, F.** (1962) F  
8-08230  
*Stud. Cercet. Biol. (anim.)*, 14 (4) : 545-8  
 Oligochete limicole din freaticul văilor Iadului şi Drăganului (Fresh water Oligochaeta from the interstitial fauna of the Iad and Drăgan valleys). *Ro Ru Fr*

Record of species of the families Naididae, Enchytraeidae, Tubificidae and Lumbriculidae collected in 1961.

- Botea, F.** (1962) F  
8-08231  
*Stud. Cercet. Biol. (anim.)*, 14 (3) : 401-9  
 Contribuţii la studiul răspîndirii oligochetelor limicole din R.P.R. (valea Motrului) (4) (Contribution to the study of the distribution of fresh water Oligochaeta in the Roumanian People's Republic (valley of the river Motru) (4)). *Ro Ru Fr*

Systematic study of 19 spp. of the families Aeolosomatidae, Naididae, Pristinidae, Enchytraeidae and Lumbriculidae, including some new species.

- Grenier, P. & J. Hamon** (1962) F  
8-08232  
*Bull. Inst. franç. Afr. noire*, 24 (1) : 316-8

Récoltes de larves et de nymphes de diptères aquatiques (Nématocères piqueurs) (Mission Bertrand, 1956-1957) (Record of larvae and nymphs of aquatic Diptera (stinging Nematocera) (Bertrand Mission, 1956-1957) )

New record of Simuliidae and Culicidae for western Central Africa.

**Hamon, J., B. Dedewanou & M. Eyraud** (1962)

F  
8-08233

*Bull. Inst. franç. Afr. noire*, 24 (3) : 854-79

Études entomologiques sur la transmission du paludisme humain dans une zone forestière africaine, la région de Man, République de Côte d'Ivoire (Entomological study on the transmission of human malaria in an African forest zone, Man region, Ivory Coast Republic). En

Study of seasonal variations in anopheline mosquitoes and their relations with malaria transmission. Establishes what species occur, and for the most important ones—particularly *A. gambiae* and *A. funestus*—studies the house-resting and man-biting densities, the physiological age, the biting-cycle, the sporozoite rate, the trophic preferences and the susceptibility to insecticides.

**Bertrand, H.** (1962)

F  
8-08234

*Bull. Inst. franç. Afr. noire*, 24 (3) : 710-77

Contribution à l'étude des premiers états des coléoptères aquatiques de la région éthiopienne (2<sup>e</sup> note). Famille: Dryopidae (Contribution to the study of the first stages of the aquatic Coleoptera of the Ethiopian region (2nd note). Family: Dryopidae)

Describes the larvae and nymphs, makes taxonomic comments. Ci 8-08166.

**Nielsen, E. S., V. K. Hansen & E. G. Jørgensen** (1962)

F  
8-08235

*Physiol. Plant.*, 15 (3) : 505-17

The adaption to different light intensities in *Chlorella vulgaris* and the time dependence on transfer to a new light intensity

Curves showing the rate of photosynthesis as a function of light intensity are presented and growth rates at the two light intensities are computed by means of the measured rates of photosynthesis and respiration. They are identical with the growth rates measured by means of the increase in number of cells. The importance is stressed of using dilute concentrations of algae in experiments of both growth and photosynthesis so that no self-shading takes place.

**Bertrand, H.** (1962)

F  
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8-08420  
*Amer. Nat.*, 96 (889) : 205-10  
 Blood types of some species of Antarctic whales

- Thiébold, J.-J.** (1962) M  
8-08421  
*C.R. Acad. Sci., Paris*, 255 (22) : 3039-40  
 Sur la différenciation sexuelle précoce des segments antérieurs du mésonephros chez la petite roussette: *Scyliorhinus caniculus* L. (On the precocious sexual differentiation of the anterior mesonephros in dog fish: *Scyliorhinus caniculus* L.)

- L.B.** (1962) M  
8-08422  
*Bull. Cent. Étud. Rech. sci., Biarritz*, 4 (1) : 94  
 Capture d'un baliste en hiver (Catching of a trigger-fish in winter)  
 Record of the capture of *Balistes capriscus* L. off the French Landes coast.

- Mousset, G.** (1962) M  
8-08423  
*Bull. Cent. Étud. Rech. sci., Biarritz*, 4 (1) : 94  
 Une cirrhose hypertrophique du foie sur *Conger vulgaris* Cuv. (An hypertrophic cirrhosis of the liver in *Conger vulgaris* Cuv.)  
 Short informative note.

- Monod, Th.** (1962) M  
8-08424  
*Bull. Inst. franç. Afr. noire (A)*, 24 (4) : 1246-7  
 Sur le rayon marginal de la pectorale du tarpon atlantique (*Megalops atlanticus* Val. 1846) (On the marginal ray of the pectoral fin of Atlantic tarpon)  
 Short note of observations on a specimen from Pointe-Noire (Congo).

- Watts, J. C. D.** (1962) M  
8-08425  
*Bull. Inst. franç. Afr. noire (A)*, 24 (4) : 1188-9  
 Relation between fat content and breeding peaks in *Pseudotolithus elongatus* (Bowd.)  
 Also contains reference to *Drepane africana* and *Pristipoma jubelini*.

- Prévost, J.** (1962) M  
8-08426  
*New Scientist.*, 16 (314) : 444-7  
 How Emperor penguins survive the Antarctic climate

General article on Aphenicidae. Cycle of life, ecology and adaptive behaviour.

**Anon. (1962)**M  
8-08427*France Pêche*, 7 (61) : 57-8

Fiche technique des poissons volante (Fishery card on flying fish)

Detachable cards, ill., giving biology, habitat, fishing, catch, commercial use of *Fodiator acutus*, *Exocetus volitans* and *Exocetus obtusirostris*.

**Cadenat, J. (1962)**M  
8-08428*Bull. Inst. franç. Afr. noire*, 24 (1) : 270-82

Notes d'ichtyologie ouest-africaine. 35. Sur quelques spécimens d'*Uraspis* (Pisces, Carangidae) des côtes du Sénégal (Notes on West African ichthyology. 35. On some specimens of *Uraspis* (Pisces, Carangidae) of the Senegal Coast)

Systematic comments based on the comparative study of material collected in the area. Contains some biometric data. Co 61-11771.

**Cadenat, J. (1962)**M  
8-08429*Bull. Inst. franç. Afr. noire*, 24 (1) : 283-98

Notes d'ichtyologie ouest-africaine. 36. Sur le statut de quelques espèces de poissons de mer ouest-africains (Notes on West African ichthyology. 36. On the status of some species of West African sea fishes)

Includes a review of the West African spp. of the genus *Cynoglossus*; a comparative study of the descriptions and types of *Solea chirophthalmus* Regan 1915 and *Vanstraelenia insignis* Chabanaud 1950, considered as synonyms; a comparative study of the descriptions and types of *Haemulon macrophthalmum* Osorio 1894 and *Parakuhlia boulengeri* Pellegrin 1913, considered as synonyms. Co 8-08428.

**Watts, J. C. D. (1962)**M  
8-08430*Bull. Inst. franç. Afr. noire*, 24 (3) : 909-11

Evidence of over-fishing in the Sierra Leone trawl fishery

Short note giving evidence based on catch decrease by unit of effort and on size composition changes, in the coastal strip. Suggests some management measures.

**Vastesaeger, M., P. Gillot & E. Vastesaeger (1961)**M  
8-08431*Bull. Cent. Étud. Rech. sci., Biarritz*, 3 (4) : 449-55

L'athérosclérose spontanée du thon rouge (*Thynnus thynnus* L.) (Spontaneous atherosclerosis of bluefin tuna (*Thynnus thynnus* L.))

Serial sections made in the coronary arteries of immature bluefin tunas (*Thynnus thynnus* L.) showed widespread intimal sclerosis in all the specimens examined. These observations prove that spontaneous atherogenesis can occur in animals having a high unsaturated and polyethenoid fatty acids diet.

# AQUATIC STOCKS

- M  
8-08432
- Hatanaka, M. & K. Sekino** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (9) : 857-61  
 (Ecological studies on the Japanese sea-bass *Lateolabrax japonicus*. 2. Growth). *Ni En*

Co 8-08433. Determination of growth by scale-reading evidence of the degree to which growth potential is realized.

- M  
8-08433
- Hatanaka, M. & K. Sekino** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (9) : 851-6  
 (Ecological studies on the Japanese sea-bass *Lateolabrax japonicus*. 1. Feeding habitat). *Ni En*

Change of diet with change of habitat; experimental evidence on amount of feeding and field evidence of competition for preferred food.

- M  
8-08434
- Hatanaka, M. & K. Iizuka** (1962)  
*Bull. Jap. Soc. sci., Fish.*, 28 (2) : 155-61  
 (Studies on the fish community in the *Zostera* area. 2. Trophic order in a fish group living outside of the *Zostera* area). *Ni En*

Stomach contents of 8 spp. of fish. Co 8-08493.

- M  
8-08435
- Mio, S.** (1962)  
*Sci. Bull. Fac. Agric. Kyushu*, 19 (4) : 507-20  
 (Studies on population biology of coastal fishes in Kyushu. 4. Age determination and growth of *Chrysophrys major* Temminck et Schlegel). *Ni En*

Age-determination by scale reading; identification of best body-area from which to take scales; length to scale-size relation; period of mark formation; von Bertalanffy equation for growth in length and weight; weight/length relation.

- M  
8-08436
- Tatsuki, K. et al.** (1962)  
*Rep. Nankai Fish. Res. Lab.*, 15 : 85-9  
 (Ecological study of tunas in the Kinan area. 3. Fluctuations of hooked rate and size composition of albacore). *Ni En*

Co 61-10147.

- M  
8-08437
- Tatsuki, K. et al.** (1962)  
*Rep. Nankai Fish. Res. Lab.*, 15 : 91-5  
 (Ecological study of tunas in the Kinan area. 4. Fluctuations of hooked rate and size composition of yellowfin). *Ni En*

Co 8-08436.

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- M  
8-08438
- Fujii, Y., K. Mimoto & S. Higasa** (1962)  
*Rep. Nankai Fish. Res. Lab.*, 15 : 127-35

(Biochemical studies on the races of tuna. 6. Several investigations on the treatment of samples in determination of the base composition of testis DNA (Pt. 2) ). *Ni En*

Co 61-10143.

- M  
8-08439
- Fujii, Y. & S. Higasa** (1962)  
*Rep. Nankai Fish. Res. Lab.*, 15 : 147-54

(Biochemical studies on the races of tuna. 8. DNA content in erythrocytes of tunas (Pt. 1) ). *Ni En*

Description of method. Co 8-08440.

- M  
8-08440
- Fujii, Y., K. Mimoto & S. Higasa** (1962)  
*Rep. Nankai Fish. Res. Lab.*, 15 : 137-45

(Biochemical studies on the races of tuna. 7. The base composition of DNA of tuna (Pt. 2) ). *Ni En*

Intra-specific variations in base composition. Co 8-08438

- M  
8-08441
- Koto, T. & K. Kodama** (1962)  
*Rep. Nankai Fish. Res. Lab.*, 15 : 97-107

(Some considerations on the growth of marlins, using size-frequencies in commercial catches. 1. Attempts to estimate the growth of sailfish). *Ni En*

Use of two methods: (1) dissection of compound curves and selection of a modal length for each component, (2) assumption of boundaries of age groups in size distributions.

- M  
8-08442
- Koto, T. & K. Kodama** (1962)  
*Rep. Nankai Fish. Res. Lab.*, 15 : 109-26

(Some considerations on the growth of marlins, using size frequencies in commercial catches. 2. Attempts to estimate the growth of so-called white marlin, *Marlina marlina* (J. and H.)). *Ni En*

Use of methods employed in previous paper and examination of annual changes in index of abundance of length classes (the index is hooked-rate weighted by the percentage of each length class). Co 8-08441.

- M  
8-08443
- Suda, A.** (1962)  
*Rep. Nankai Fish. Res. Lab.*, 15 : 1-37

(Studies on the population structure and catch variation of the North Pacific albacore). *Ni En*

Racial problems and life history; representation of abundance of fishable stock: size and age composition and relation between abundance and other factors; possibility of forecasting abundance.



# AQUATIC STOCKS

- Suda, A.** (1962) M  
8-08444  
*Rep. Nankai Fish. Res. Lab.*, 15 : 69-77  
 Catch variations in the North Pacific albacore. 3. Comparison of abundance between albacore and big-eye in the north west Pacific  
 Examination of annual variation of indexes of relative abundance of exploitable fish on the fishing grounds and of the relative abundance of size and age groups. Issued also as: *Contr. Nankai Fish. Res. Lab.*, (166). CR 9-04401.
- Kume, S.** (1962) M  
8-08445  
*Rep. Nankai Fish. Res. Lab.*, 15 : 79-84  
 A note on the artificial fertilization of bigeye tuna, *Parathunnus mebachii* (Kishinouye)  
 Ill. description of development of eggs. Issued also as: *Contr. Nankai Fish. Res. Lab.*, (169).
- Morio, T., A. Suzuki & S. Higasa** (1962) M  
8-08446  
*Rep. Nankai Fish. Res. Lab.*, 15 : 155-9  
 (Biochemical studies on the growth and maturation of fish. 14. Preliminary survey on zinc in pyloric coeca). *Ni En*  
 Forms of Zn in various tunas. Ci 585890, Ci 60-9149.
- Humes, A. G.** (1961) M  
8-08447  
*Mem. Inst. sci. Madagascar (F)*, 4 : unpag.  
 Copépodes parasites de mollusques à Madagascar (Copepoda parasites of molluscs in Madagascar)  
 Re 61-00388.
- Asano, M. & M. Itoh** (1962) M  
8-08448  
*Tohoku J. agric. Res.*, 13 (2) : 151-67  
 Toxicity of a lipoprotein and lipids from the roe of a blenny, *Dinogunellus grigorjewi* Herzenstein  
 Extraction of lipoprotein fraction and assay of its toxicity.
- Ishida, R., T. Sasaki & S. Arita** (1962) M  
8-08449  
*Bull. Hokkaido Fish. Res. Lab.*, 24 : 171-6  
 (Histological studies on ovarian eggs of herring, *Clupea pallasii*, with special reference to so-called 'shiniko'—abnormal eggs). *Ni En*
- Konda, M.** (1962) M  
8-08450  
*Bull. Hokkaido Fish. Res. Lab.*, 24 : 139-47  
 (The relation between the size of mesh of salmon gill net and the length of salmons in the catches). *Ni En*  
 Relation between fork length and maximum circumference of red, chum, coho and pink salmon and selection range for each species.

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**Sano, O.** (1962)

M  
8-08451

*Bull. Hokkaido Fish. Res. Lab.*, 24 : 148-62

(The investigation of salmon shark as a predator on salmon in the North Pacific, 1960). *Ni En*

Distribution, migration, feeding habits and other features of the biology of salmon sharks, and consideration of the place occupied by this sp. in the food-web.

**Koga, S.** (1962)

M  
8-08452

*Bull. Fac. Fish. Nagasaki*, 12 : 1-11

(Studies on the fluctuations in catch of the tuna-fishing fleet. 10. Variability of hooked-rates for tunas and marlins in the western South Pacific Ocean during four months from August to November 1960). *Ni En*

Tabulation of rates and comparisons between seasons and areas. CR 61-08291.

**Mizue, K. & K. Yoshida** (1962)

M  
8-08453

*Bull. Fac. Fish. Nagasaki*, 12 : 45-52

(Studies on the little toothed whales in the west sea area of Kyusyu. 8. About *Grampus griseus* caught in Goto Is., Nagasaki Pref.). *Ni En*

Body and skull measurements, coloration, schooling habit, reproduction. Co 62-03292.

**Kuniyuki, K. & T. Koide** (1962)

M  
8-08454

*Bull. Naikai Fish. Res. Lab.*, 18 : 1-9

(The ecological study of the *Hemiramphus sajori* (Temminck et Schlegel) ). *Ni En*

Development, growth rate, breeding season, sex-ratio, vertebral number, of a population of this sp. caught along the coast near Onomichi; feeding, length/weight relation and length/scale-diameter relation. Issued also as: *Contr. Naikai Fish. Res. Lab.*, (99).

**Tatara, K., Y. Yamaguchi & T. Hayashi** (1962)

M  
8-08455

*Bull. Naikai Fish. Res. Lab.*, 16 : 199-228

(Study for the restoration of length and weight of prey fishes, found in the stomachs of predators, by graphic estimation using column length of fish vertebrae). *Ni En*

Relations between vertebral column length (V.L.), body length (B.L.) or anal length (A.L.), between B.L. (or A.L.) and total length (T.L.) or fork length (F.L.), and between log T.L. (or log A.L.) and log B.W., are examined statistically for 76 of the spp. dealt with in Takahashi (1962), and results are presented in tabular and graphic form.

- Takahashi, Y.** (1962) M  
8-08456  
*Bull. Nakai Fish. Res. Lab.*, 16 : 1-198  
 (Study for the identification of species based on the vertebral column of Teleostei in the inland sea and its adjacent waters). *Ni En*

Study of 256 spp. from 100 families, with description and photographs of vertebral column of each sp. and keys entered by: (1) vertebral characters, (2) vertebral numbers, (3) caudal vertebral number, (4) number of vertebrae in parts of the column.

- Blanc, M.** (1961) M  
8-08457  
*Mem. Inst. sci. Madagascar (F)*, 4 : 109-59

Les poissons des terres australes et antarctiques françaises (Fishes from southern and Antarctic French lands)

Ill. list, with morphological notes of fishes taken on Kerguelen Is., Adélie Land, and St. Paul and Amsterdam Islands.

- Dotu, Y.** (1962) M  
8-08458  
*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 549-50  
 (Symposium on the culture of fish in sea-water. 2. Culture of blood fish stock). *Ni*

CR 8-08464.

- Enomoto, Y. & S. Hamada** (1962) M  
8-08459  
*Bull. Jap. Soc. sci. Fish.*, 28 (3) : 314-21

Studies on plankton off the west coast of Kyushu. 3. On the foods of the sardine, *Sardinia melanosticta* (Temminck et Schlegel)

Samples of sardine were collected and stomach contents taken, body length and weight and fat content were measured, sex ratio was recorded; their stomach contents of phyto- and zoo-plankton were classified; plankton hauls were made; relations between these were studied.

- Fujii, T.** (1961) M  
8-08460  
*Bull. Fac. Fish. Hokkaido*, 12 (2) : 129-37  
 (Exploratory fishing of salmon with gill nets of various mesh sizes and with a trammel net in Aleutian waters 1957). *Ni En*

Specifications of gear, species, age and size composition of catch; catching rates.

- Fujiva, M. & U. Kobayashi** (1962) M  
8-08461  
*Bull. Jap. Soc. sci. Fish.*, 28 (6) : 561-4

A symptom observed on the eyes of fish bred in aquaria

Histo-pathological examination and diagnosis.

**Fourmanoir, P. (1961)**M  
8-08462*Mem. Inst. sci. Madagascar (F)*, 4 : 1-81

Requins de la côte ouest de Madagascar (Sharks of the west coast of Madagascar)

Ill. morphological account of spp. taken, with notes on localities of occurrence, and tabulations of morphometric data.

**Fourmanoir, P. (1961)**M  
8-08463*Mem. Inst. sci. Madagascar (F)*, 4 : 83-107

Liste complémentaire des poissons du canal de Mozambique (Supplementary list of fishes of the Mozambique Channel)

Ill. list with brief notes on form and locality of capture.

**Harada, T. (1962)**M  
8-08464*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 552-3(Symposium on the culture of fish in sea-water. 4. The crux of the problems on the culture of young yellowtail). *Ni*

CR 8-08458.

**Anon. (1962)**MG  
8-08465*Fish. News., Lond.*, (2573) : 7

ICES mesh gauge

WFA 14 (1) : 14-1171. Fishing methods and gear—Nets—Mesh measurement.

**Mann, H. (1961)**MF  
8-08466*Fischwirt.*, 11 (8) : 233-9

Gewichtsverluste bei Hälterung von Aalen (Loss of weight in eels while kept in holders)

**Michailowa, L. (1961)**MF  
8-08467*Dtsch. Fish.-Ztg.*, 8 (6) : 191-2

Die Fischwanderungen (Fish migrations)

Popular review.

**Jokiel, J. & T. Backiel (1960)**MF  
8-08468*Roczn. Nauk rol. (B)*, 75 (2) : 213-22Polowy troci (*Salmo trutta* L.) w Zatoce Gdańskiej i w systemie rzecznym Wisły (Catches of sea-trout (*Salmo trutta* L.) in the Danzig Bay and in the Vistula River system). *Pl Ru En*



- Richardson, T. & A. L. Tappel** (1962) MF  
*J. Cell. Biol.*, 13 (1) : 43-54 8-08469  
 Swelling of fish mitochondria

WFA 14 (1) : 14-1053.

- Muić, N. & A. Meniga** (1962) MF  
*Arch. Biochem.*, 96 : 280-6 8-08470  
 The biochemistry of protamine from the milt of *Mugil cephalus*

WFA 14 (1) : 14-1473. Fish-chemical composition—Miscellaneous constituents.

- Kurohagi, T. & S. Sasaki** (1964) MF  
*Sci. Rep. Hokkaido Salm. Hatch.*, (18) : 91-111 8-08471  
 (Some ecological studies on the kokanee salmon (*O. nerka* var. *adonis*) in Lake Shikotsu, Hokkaido. 2. Some observations on the growth of scale).  
 Ní En

Observation of growth patterns and relation of increase of circuli and radius to growth of fish. Co 8-08487.

- Leray, C.** (1963) MF  
*C.R. Acad. Sci., Paris*, 256 (3) : 795-8 8-08472  
 Étude de l'incorporation de cystéine marquée au soufre 35 dans le système hypothalamohypophysaire et plus spécialement dans l'adénohypophyse chez un téléostéen: *Mugil cephalus* L. (Study on the incorporation of cysteine, with sulphur 35, in the hypothalamo-hypophysial system and particularly in the adenohypophysis of a teleostean: *Mugil cephalus* L.)

Preliminary note, reporting results of experiments on fish kept in aquarium.

- Smith, M. S.** (1962) MF  
*Conservationist*, 16 (6) : 20-1 8-08473  
 Ecology on parade. Fish habitat groups artistically displayed by the Rochester Museum

BA 40 (2) 4287.

- Fry, D. H.** (1961) MF  
*Bull. Pacif. Mar. Fish. Comm.*, 5 : 77-83 8-08474  
 Some problems in the marking of salmonids

Discussion of evidence on the regeneration of clipped fins and of the mortality among fish marked in this way.

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**Sano, T.** (1962) MF  
8-08475  
*J. Tokyo Univ. Fish.*, 48 (1) : 99-104

Haematological studies of the culture fishes in Japan. 5. Application of a protein refractometer on fish serum

Test, by comparison with results from micro-Kjeldahl method, of the Hitachi hand protein refractometer for measurement of relative changes of serum protein. Interspecific differences in the results, and those due to feeding, are considered. Co 61-04722.

**Sano, T.** (1962) MF  
8-08476  
*J. Tokyo Univ. Fish.*, 48 (1) : 105-9

Haematological studies of the culture fishes in Japan. 6. Variation in blood constituents of Japanese eel, *Anguilla japonica*, during starvation

Variation in blood sugar, serum protein, serum NPN, blood urea, blood creatinine and haematocrit, during starvation for 90 days. Co 8-08475.

**Breguet, Cl.** (1961) MF  
8-08477  
*Bull. Cent. Étud. Rech. sci., Biarritz*, 3 (4) : 437-47

La résistance hydrodynamique du poisson. Discussion des expériences du professeur Magnan (Fish hydrodynamic drag. Discussion of the experiments of professor Magnan)

Reviews experiments in the light of recent progress in hydrodynamics.

**Nakano, T.** (1962) MF  
8-08478  
*Bull. Jap. Soc. sci. Fish.*, 28 (4) : 453-5

(Studies on the physiological chemistry of phosphorus compounds in fish muscle. 10. General properties of myosin ATP-ase isolated from fish muscle). Ni En

Co 8-08538.

**Yamaguchi, K. et al.** (1962) MF  
8-08479  
*Bull. Jap. Soc. sci. Fish.*, 28 (2) : 192-200

(Studies on multiple hemoglobins of eel. 2. Oxygen dissociation curve and relative amounts of components F and S). Ni En

Alkali denaturation curves of hemoglobin and myoglobin were determined mainly in oxy form under various conditions. Co 8-08480.

**Yamaguchi, K. et al.** (1962) MF  
8-08480  
*Bull. Jap. Soc. sci. Fish.*, 28 (2) : 184-91

(Studies on multiple hemoglobins of eel. 1. Absorption spectrum and some other properties). Ni En

The other properties include solubility curves in carbonyl form, alkali denaturation curves in oxy form, heat coagulation curves, electrophoretic patterns and pH-mobility curves.

- MF  
8-08481
- Satch, H., N. Nakamura & T. Hibiya** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (6) : 579-84  
 (Studies on the sexual maturation of the eel. 1. On the sex differentiation and the maturing process of the gonads). Ni En

Histological study of *Anguilla japonica*.

- MF  
8-08482
- Hoshina, T.** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (2) : 162-4  
 On a new bacterium, *Paracolobactrum anguillimortiferum* n. sp.

Morphology, culture characteristics, pathogenicity and habitat of this bacterium responsible for red disease of eels.

- MF  
8-08483
- Wohlschlag, D. E.** (1962)  
*Science*, 137 (3535) : 1050-1  
 Metabolic requirements for the swimming activity of three antarctic fishes

Ci 581465; 582118; 60-0203; 61-00965; 61-06950. Logarithm of amount of oxygen consumed per unit swimming velocity for steadily swimming fishes of genus *Trematomus* at freezing temperatures is of same order as rate for temperature species at their lower temperature ranges. Comparison with publ. data for *Salvelinus*, *Coregonus*, *Oncorhynchus*, *Lepomis*, *Carassius*, *Trachurus*.

- MF  
8-08484
- Sakano, E.** (1961)  
*Sci. Rep. Hokkaido Salm. Hatch.*, 16 : 103-6  
 Anaesthetizing experiments of chum salmon fry with tricaine methane-sulfonate (M.S. 222)

Experimental results and conclusions.

- MF  
8-08485
- Kobayashi, T.** (1961)  
*Sci. Rep. Hokkaido Salm. Hatch.*, 16 : 1-102  
 (Biology of chum salmon, *Oncorhynchus keta* (Walbaum), by the growth formula of scale). Ni En

Detailed examination of the scale-reading technique applied to this sp., with reference to relations between growth of fish, growth of scale and number of circuli; use of data from scale-reading for examination of differences of growth between fish of different species and years.

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**Nagasawa, A. & S. Sano** (1961)

MF  
8-08486

*Sci. Rep. Hokkaido Salm. Hatch.*, 16 : 107-25

(Some observations on the downstream chum salmon fry (*Oncorhynchus keta*) counted in the natural spawning ground at Memu Stream, 1957-1959).  
*Ni En*

The natural spawning efficiency of chum salmon (*Oncorhynchus keta*) in Memu Stream, a tributary of the Tokachi River in east Hokkaido, was studied by using the count-trap during 1957 to 1959. Total eggs deposited on experimental spawning ground estimated from count of females and average fecundity.

**Kurohagi, T. & S. Sasaki** (1961)

MF  
8-08487

*Sci. Rep. Hokkaido Salm. Hatch.*, 16 : 137-43

(Some ecological studies on the kokanee salmon (*O. nerka* var. *adonis*) in Lake Shikotsu, Hokkaido. 1. Frequent occurrence of adult salmon with abnormal ovaries in 1956). *Ni En*

Examination of the relation between these occurrences and feeding conditions and average size of the individuals of the stock.

**Tokui, T.** (1961)

MF  
8-08488

*Sci. Rep. Hokkaido Salm. Hatch.*, 16 : 127-36

(Studies on the kokanee salmon. 4. Spawning migration of the kokanee salmon in Lake Shikotsu, Hokkaido, Japan). *Ni En*

Records, for years 1954 to 1960, of numbers of salmon caught and sex ratio, and of surface temperatures; proposed use of these data in development of a plan for improved conservation methods. Co 61-04702.

**Enomoto, N. & Y. Tomiyasu** (1962)

MF  
8-08489

*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 510-3

(Studies on the external mucous substance of fishes. 7. Quantitative analysis of the mucus-polysaccharide from some fishes. 1. Neutral sugar composition). *Ni En*

The column chromatographic method using an ion exchange resin (Dowex 1) was applied to the quantitative analysis of neutral sugars in mucus-polysaccharide from 6 species of fishes. Co 61-11036.

**Hamada, K.** (1961)

MF  
8-08490

*Mem. Fac. Fish. Hokkaido*, 9 (1) : 1-55

Taxonomic and ecological studies of the genus *Hypomesus* of Japan

The study is based on extensive data on meristic characters and body proportions, obtained from samples from several Japanese localities; it includes ecological data and observations (with photographs) on embryology and early larval life. Discussion on speciation and of the fishery problems.



# AQUATIC STOCKS

**Fukuda, Y.** (1962)

MF  
8-08491

*Bull. Naikai Fish. Res. Lab.*, 18—indep. pag. 1-22

(Analysis of intermingling with an application to ecological study of fish populations). *Ni En*

Attempt to measure intermingling by statistical operations on frequency distributions of characters whose distributions overlap. Intermingling of Asian and North American salmon on the high seas is discussed. Issued also as: *Contr. Naikai Fish. Res. Lab.*, (101).

**Hatanaka, M. & K. Iizuka** (1962)

MF  
8-08492

*Bull. Jap. Soc. sci. Fish.*, 28 (3) : 305-13

(Studies on the fish community in the *Zostera* area. 3. Efficiency of production of *Sebastes inermis*). *Ni En*

Estimate of growth as g/kg/day and comparison with rates in other spp., conversion of small crustaceans into *Sebastes* biomass calculated from experimental results; discussion of the means of directing available food supplies of *Zostera* beds to spp. capable of most efficient conversion. Co 8-08434.

**Hatanaka, M. & K. Iizuka** (1962)

MF  
8-08493

*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 5-16

(Studies on the fish community of the *Zostera* area. 1. The ecological order for feeding in the fish group related to the dominant species). *Ni En*

Study based on examination of stomach contents.

**Balon, E. K.** (1961)

F  
8-08494

*Biológia*, 16 (7) : 532-7

Zistovanie dennej aktivity rýb pomocou čereňom (Determination of the diurnal activities of fish by means of a set net). *Slovy Ry De*

Experiments carried out in a small lake in Moravia, Czechoslovakia, confirm relationship between catch and diurnal rhythm.

**Miegel, H.** (1961)

F  
8-08495

*Fischwirt*, 11 (7) : 214-6

Über die Beurteilung von Futtermitteln für Forellen (How to judge fodder for trout)

**Menzel, H.-U.** (1961)

F  
8-08496

*Dtsch. Fisch.-Ztg.*, 8 (8) : 226-35

Über den Stand und die Aufgaben der Karpfenteichwirtschaft in der Deutschen Demokratischen Republik (On the state and problems of carp management in Eastern Germany)

Gives average yield/ha, percentage of carp production in the whole inland fishery, recommendations for improvement.

- Eppel (1961)** F  
8-08497  
*Dtsch. Fisch.-Ztg.*, 8 (8) : 246-51  
 Ertragssteigerung der Speisefischproduktion durch Entenfreihaltung in der Binnenfischerei (Increase of yield in marketable fish production by open-area side lining of ducks)  
 Describes beneficial effects of duck-carp associations.
- Brunner, G. (1961)** F  
8-08498  
*Fischwirt*, 11 (8) : 240-1  
 Neure Erkenntnisse über die infektiöse Bauchwassersucht des Karpfens (Recent experiences with the infectious dropsy in carp)
- Bank, O. (1961)** F  
8-08499  
*Fischwirt*, 11 (8) : 250-4  
 Der Kalkschock (The lime shock)  
 Describes experiments with and effects of quick-lime applications of bottom of ponds with differing humus-content.
- Schlumpberger, W. (1961)** F  
8-08500  
*Dtsch. Fisch.-Ztg.*, 8 (9) : 259-61  
 Besatz mit Hechtbrut oder vorgestreckten Hechten? Ein Beitrag zur Frage der Rentabilität des Hechtbesatzes (Stocking with fry or with fingerlings of pike? A contribution to the question of rentability in pike stocking)  
 Points out advantages of stocking with fry.
- Merla G. (1961)** F  
8-08501  
*Dtsch. Fisch.-Ztg.*, 8 (9) : 271-3  
 Ein Fall mangelnder Futteraufnahme bei einsömmrigen Karpfen (A case of deficient food intake in one-summer old carp)  
 Describes observations and relates rate of consumption of artificial food to standing crop of bottom dwelling and planktonic animals.
- Rasmussen, J. (1961)** F  
8-08502  
*Dtsch. Fisch.-Ztg.*, 8 (7) : 206-14  
 Die Bedeutung und die Aufgaben der dänischen Forellenteichwirtschaft (The importance and the tasks of the Danish trout farm management)
- Spurny, J. (1961)** F  
8-08503  
*Dtsch. Fisch.-Ztg.*, 8 (7) : 214-9  
 Durch Nebenfische in den Karpfenteichen zur Erhöhung der Rentabilität und Produktivität der tschechoslowakischen Teichwirtschaftsbetriebe (Additional fishes in carp ponds increase the rentability and productivity in Czechoslovakian pond farms)  
 Association of different species.

**Ribiánszky, M.** (1961)

F  
8-08504

*Dtsch. Fisch.-Ztg.*, 8 (7) : 220-4

Produktionserhöhung und Bekämpfung der Fischkrankheiten durch Wechselwirtschaft in den ungarischen Teichwirtschaften (Increase in production and control of fish diseases by means of rotation in Hungarian pond farms)

Points out the advantages of rotation system, especially on poor soils.

**Müller, H.** (1961)

F  
8-08505

*Dtsch. Fisch.-Ztg.*, 8 (2) : 37-42

Ertragssteigerung durch Kleinmaränenbesatz (Increased yield with white-fish stocking)

Discusses value of *Coregonus albula* for small water bodies.

**Müller, W.** (1961)

F  
8-08506

*Dtsch. Fisch.-Ztg.*, 8 (2) : 43-7

Neure Untersuchungen über die Quappe (*Lota lota* L.) (Recent investigations of burbot (*Lota lota* L.))

**Gottwald, St.** (1961)

F  
8-08507

*Dtsch. Fisch.-Ztg.*, 8 (2) : 48-52

Die Anwendung von Malachitgrün und Kochsalz beim Erbrüten und Haltern von Laichfischen in Polen (The application of malachite green and sodium chloride for incubation and storage of breeders in Poland)

Describes prophylactic treatments for control of fungus and gives technical details for the procedure.

**Wiesner, E. R.** (1961)

F  
8-08508

*Allg. Fisch.-Ztg.*, 86 (19) : 583-6

Forellenzucht in Dänemark (Trout farming in Denmark)

**Mann, H.** (1961)

F  
8-08509

*Allg. Fisch.-Ztg.*, 86 (13) : 402-4

Der Einsatz von Antibiotika in der Fütterung und in der Krankheitsbekämpfung bei Fischen (The application of antibiotics in feeding and disease-control of fish)

Reviews literature; reports on experiments with trout and carp and discusses results.

F

**Deufel, J.** (1961)

8-08510

*Allg. Fisch.-Ztg.*, 86 (14) : 439-41

Fütterungsversuche mit einem Fertigfutter für Forellen (Experiments with a ready-made food for trout)

Describes experiments in concrete tanks and gives analysis of results and recommendations for their utilization.

F

**Bank, O.** (1961)

8-08511

*Allg. Fisch.-Ztg.*, 86 (15) : 466-8

Fütterungsversuche von Kv mit Trockenfutter (Feeding carp fry with dry fodder; experiments)

Describes aquarium experiments.

F

**Merla, G.** (1961)

8-08512

*Dtsch. Fisch.-Ztg.*, 8 (6) : 179-82Zur Bekämpfung der Karpfenlaus (*Argulus*) in der Teichwirtschaft (The control of the fish-louse (*Argulus*) in pond management)

Reports on results of experiments with "Lindane" carried out in Eastern Germany. Emphasizes the toxic effect on minor pond animals.

F

**Müller, W.** (1961)

8-08513

*Dtsch. Fisch.-Ztg.*, 8 (6) : 183-7

Der Einfluss der Kalkung auf das Wasser in der Teichwirtschaft Königswartha im Jahre 1960 (The influence of lime-application on the water of the pond farm of Königswartha during 1960)

F

**Menzel, H.-U.** (1961)

8-08514

*Dtsch. Fisch.-Ztg.*, 8 (6) : 188-90

Zur Einführung einer einheitlichen Teichkartei für Karpfenteichwirtschaften (The introduction of a uniform card-index for carp culture)

F

**Grabda, J.** (1961)

8-08515

*Roczn. Nauk rol.*, 93-D, 445-59

Zdrowotność ryb w potoku Trzebiocha (The health of fish in the Trzebiochia stream). Ro

Parasites found on *Salmo trutta* m. *lacustris* (L.), *Gobio gobio* (L.), *Blicca björkna* (L.), *Alburnus alburnus* (L.), *Rutilus rutilus* (L.), *Esox lucius* (L.), *Perca fluviatilis* (L.), *Acerina cernua* (L.), *Gasterosteus aculeatus* (L.), and *Lota lota* (L.), are listed.

F

**Tesch, F. W.** (1961)

8-08516

*Dtsch. Fisch.-Ztg.*, 8 (10) : 299-301

Die Möglichkeiten der Zanderertragssteigerung (The possibilities of raising the yield of pike perch)

Discusses economical features in stocking natural waters and proposes minimum sizes in accordance with the different habitats.



**Lieder, U. (1961)**F  
8-08517*Dtsch. Fisch.-Ztg.*, 8 (10) : 302-5

Urethan—eine krebserzeugende Verbindung (Urethane, a cancer producing compound)

Discusses pathogenic effects after induction of ethyl-carbonate and proposes substitutes to facilitate the stripping of spawners.

**Amlacher, E. & W. Müller (1961)**F  
8-08518*Dtsch. Fisch.-Ztg.*, 8 (10) : 306-11Untersuchungen über den Einfluss unterschiedlicher Ernährung auf Körperproportionen, Hämoglobin, Serumeiweiss und Fettgehalt von *K<sub>2</sub>* (Investigations on the influence of different nutrition on body proportions, hemoglobin, blood protein and fat content of two-year old carp)**Bontemps, S. (1960)**F  
8-08519*Roczn. Nauk rol. (B)*, 75 (2) : 179-211Ocena stanu pogłowia certy z systemu rzeki Wisły (An estimation of *Vimba vimba* L. stocks in the Vistula River system). *Pl Ru En*

An account of general biological studies initiated as a prelude to a study of the population dynamics.

**Radziej, J. (1960)**F  
8-08520*Roczn. Nauk rol. (B)*, 75 (2) : 223-35Występowanie sielawy w jeziorach obszaru przyległego do prawego brzegu dolnej Wisły (The occurrence of ablen (*Coregonus albula* L.) in lakes of the area neighboring the right bank of the lower Vistula). *Pl Ru En*

Also includes accounts of stocking of the lakes.

**Horoszewicz, L. (1960)**F  
8-08521*Roczn. Nauk rol. (B)*, 75 (2) : 237-58Wartość kości gardłowych dolnych (Ossa faringea inferiora) jako kryteriów gatunkowego oznaczania ryb karpiowatych (Cyprinidae) (The value of lower pharyngeal arches as species criteria for defining fish of the Cyprinidae family). *Pl Ru En*

Presents and systematizes differences in shape of pharyngeal arches of cyprinid fish of the Vistula River.

**Gottwald, S. (1960)**F  
8-08522*Roczn. Nauk rol. (B)*, 75 (2) : 259-71Niska zawartość tlenu w wodzie przyczyną puchliny woreczka żółtkowego (*Hydrocoele embrionalis*) u larw pstrąga tęczowego (*Salmo irideus* Gibb.) (Low oxygen level as a cause of blue-sac disease (*Hydrocoele embrionalis*) of rainbow trout alevins (*Salmo irideus* Gibb.)). *Pl Ru En*

Results demonstrate significance of proper oxygenation during embryonic development; constant oxygen deficit caused mass occurrence of constitutional blue-sac disease in the alevins.

- Bernatowicz, S.** (1960) F  
8-08523  
*Roczn. Nauk rol. (B)*, 75 (2) : 273-82

Obserwacje nad wsiedlaniem sielawy do jeziora z wysokim pułapem siarkowodoru (Observations on stocking lakes with a high hydrogen sulphide ceiling with ablen (*Coregonus albula* L.)). *Pl Ru En*

- Turoboyski, L.** (1960) F  
8-08524  
*Roczn. Nauk rol. (B)*, 75 (3) : 401-45

Prob określenia wpływu wysokich dawek niektórych związków chemicznych na narybek karpia (Attempt to determine the influence of high doses of some chemical compounds upon carp fry). *Pl Ru En*

Preliminary studies of the effects of: ammonia, blue vitriol, phenol, cresol, sodium sulphide, sodium carbonate, potassium chloride and sodium sulphate.

- Disclos, P.** (1963) F  
8-08525  
*C.R. Acad. Sci., Paris*, 256 (1) : 280-1

Rôle régulateur morphogénétique du diencephale chez les amphibiens (Morphogenetic regulatory role of the diencephalon in Amphibia)

Preliminary note, reporting results of experiments on *Bufo viridis* and *Rana temporaria*.

- Quillier, R., J. Maetz & M. Secondat** (1963) F  
8-08526  
*C.R. Acad. Sci., Paris*, 256 (1) : 271-3

Non-utilisation, par le poisson rouge (*Carassius carassius auratus* L.) des solutions à très haute dilution de glucose marqué (Non-utilization of highly diluted solutions of glucose concentrations by the goldfish, *Carassius carassius auratus* L.)

Preliminary note. Experiments demonstrate the incapacity of the fish to utilize glucose as it exists in natural waters, contrary to the theory of Putter.

- Nose, T.** (1961) F  
8-08527  
*Bull. Freshw. Fish. Res. Lab., Tokyo*, 11 (2) : 29-42

(Determination of nutritive value of food protein on fish. 1. On the determination of food protein utilization by carcass analysis). *Ni En*

Growth of goldfish and rainbow trout and proximate composition of carcasses when fed with various diets; nitrogen metabolism.

- Yamamura, Y. & S. Muto** (1961) F  
8-08528  
*Bull. Tohoku Fish. Res. Lab.*, 19 : 171-9

(Change of vitamin A and carotenoids during development of the salmon-eggs). *Ni En*

Anon. (1963)

F  
8-08529*Dokl. Akad. Nauk SSSR*, 148 (2) : 481

Popravka k stat'e I. N. Ostroumovoi 'O pervom poiavlenii gemoglobina u embrionov raduzhnoi foreli (*Salmo irideus* Gibbons)' napechatannoi v DAN, tom 147, No. 1, 1962 g. (Errata to the article of I. N. Ostroumova 'The first appearance of haemoglobin in embryos of *Salmo irideus* Gibbons' (Doklady, 147, No. 1 (1962) )

Er 8-06437.

Dekeyser, P.-L. (1962)

F  
8-08530*Bull. Inst. franç. Afr. noire (A)*, 24 (4) : 1190-241

Morphologie et biologie des oiseaux de l'ouest africain (Notes documentaires). V. Ardéiformes (Morphology and biology of birds of West Africa (Documentary notes). V. Ardeiformes)

Remarks on geographical distribution, biology, ecology and parasitology.

Papadopol, M. (1962)

F  
8-08531*Stud. Cercet. Biol. (anim.)*, 14 (3) : 393-400

Date noi privind biologia reproducerii plăticiei *Abramis brama* L. din cursul inferior al Dunării (New data on the biology of the reproduction of bream *Abramis brama* L. of the lower Danube). Ro Ru Fr

Report of observations on the size, weight and age at first maturity and conclusion that the bream of the lower Danube constitutes a sub-species of *Abramis brama danubii* Pavlov.

Gras, R. (1962)

F  
8-08532*Bull. Inst. franç. Afr. noire*, 24 (1) : 245-61

Étude biométrique des *Alestes baremoze* du bassin du Bas-Chari (Biometric study of *Alestes baremoze* from the lower Chari basin)

Considers various morphometric and meristic characters and makes a comparative study with *Alestes dentex*.

Nakano, T. (1961)

F  
8-08533*Bull. Jap. Soc. sci. Fish.*, 27 (10) : 908-11

(Studies on the physiological chemistry of phosphorus compounds in fish muscle. 7. The effect of urethan on phosphorus compounds in muscle of gibel). Ni En

Narcotizing effect on *Carassius auratus* of various concentrations of urethan, phosphorus content of muscle of fish narcotized with these concentrations and differences of *post-mortem* changes in phosphorus content. Co 62-00982.

**Ando, K.** (1962)

F  
8-08534

*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 73-6

(Change of the lipid during development of rainbow trout eggs). Ni En

On 8 stages of development of rainbow trout eggs, moisture, ash, total nitrogen, total lipid, acetone soluble and insoluble lipid were determined. Unsaponifiable matter, acid value, iodine value and mean molecular equivalent of fatty acid in the acetone soluble lipid were determined.

**Ando, K.** (1962)

F  
8-08535

*Bull. Jap. Soc. sci. Fish.*, 28 (3) : 340-3

(Change in fatty acids composition of acetone soluble lipids during development of rainbow trout eggs). Ni En

**Buchheim, C. E.** (1962)

F  
8-08536

*Nature, Lond.*, 196 (4857) : 902-3

Lethal effects in tadpoles of *Xenopus laevis* (Daudin) after irradiation with high-energy electrons

**Hayama, K. & S. Kuwabara** (1962)

F  
8-08537

*Bull. Jap. Soc. sci. Fish.*, 28 (2) : 179-83

(Studies on enzymes in fish blood. 2. Effect of organophosphorus insecticides on cholinesterase activity). Ni En

Consideration of the mechanism of inhibition by these compounds.

**Nakano, T. & Y. Tsuchiya** (1962)

F  
8-08538

*Bull. Jap. Soc. sci. Fish.*, 28 (2) : 173-8

(Studies on the physiological chemistry of phosphorus compounds in fish muscle. 9. Effect of loading on phosphorus compounds in fish muscle). Ni En

Lead weights, ranging from 2 to 25% of body weight, were attached to gibel (*Carassius auratus*) for periods up to 15 days; the fish were stored at 0°C after death and phosphorus compounds were estimated at intervals up to 72 hours: variation of *post-mortem* changes of these compounds according to weight placed on the fish was studied. Co 8-09283.

**Yanni, M.** (1962)

F  
8-08539

*Z. vergl. Physiol.*, 45 (4) : 309-5

Effect of starvation on contents of water and lipides of tissues of *Clarius lazera*

**Yanni, M.** (1961)

F  
8-08540

*Z. vergl. Physiol.*, 45 (1) : 50-5

Lipides and water content of the tissues of *Clarius lazera*



# AQUATIC STOCKS

**Yanni, M.** (1961) F  
8-08541  
*Z. vergl. Physiol.*, 45 (1) : 56-60  
 Studies on carbohydrate content of the tissues of *Clarius lazera*

**Jain, S. L.** (1961) F  
8-08542  
*J. zool. Soc. India*, 13 (2) : 99-107  
 Monogenea of Indian freshwater fishes. 11. Three new trematodes belonging to the genus *Dactylogyrus* Diesing, 1850

Ill diagnosis of each sp. and key to Indian spp. of the genus. Ci 61-03237, Ci 59-7434, Ci 580877.

**Swarup, K.** (1961) F  
8-08543  
*J. zool. Soc. India*, 13 (2) : 108-12  
 The fecundity of Indian shad, *Hilsa ilisha* (Hamilton)

Regressions of fecundity on total weight, total length, and fork length.

**Chun, S. K.** (1962) F  
8-08544  
*Bull. Fish. Coll. Pusan Univ.*, 4 (1/2) : 21-38  
 (Studies on some trematodes whose intermediate hosts are fishes in the Naktoqn River). Ni En

Tables showing spp. of metacercaria and the fish spp. in which they were found, giving the numbers of each sp. of fish infected with each sp. of metacercaria. Ill. description of the metacercaria.

**Tamura, O., T. Fujiki & K. Eto** (1962) F  
8-08545  
*Bull. Fac. Fish. Nagasaki*, 12 : 72-7  
 (On the decrease of hematocrit value of fish by the extraction of blood). Ni En

Test of rate of erythrocyte production.

**David, A.** (1961) F  
8-08546  
*J. zool. Soc. India*, 13 (2) : 194-205  
 Notes on the embryonic and larval development of the goonch, *Bagarius bagarius* (Hamilton)

Notes on bionomics and fishing; observations on occurrence of eggs; ill. description of embryonic and larval development to 32-day fry, 22 mm in total length, and of 54 mm fingerling.

**Gamo, H.** (1961) F  
8-08547  
*Bull. Jap. Soc. sci. Fish.*, 27 (10) : 893-6  
 Further report on nutrient transmission through periblast in the medaka, *Oryzias latipes*

Observations on yolk protrusion into the periblast in stages from just after fertilization to the late blastula.

**Gamo, H. & F. Araki** (1961)

F  
8-08548

*Bull. Jap. Soc. sci. Fish.*, 27 (10) : 897-902

An *in vivo* observation of mitotic multiplication of periblast nuclei in embryo of the medaka, *Oryzias latipes*

## MISCELLANEOUS AND AUXILIARIES

**Cole, H. A.** (1962)

M  
8-08549

*Fish. News. Lond.*, (2556) : 4 p.

World resources ample; ocean farming feasible; British conservation—a myth

WFA 14 (1) : 14-1071. Fisheries resources—world.

**Ranken, M. B. F.** (1962)

M  
8-08550

Paper presented at First International Congress of Food Science and Technology, London, 18-21 September 1962

The seas as a solution to the world's food shortages

WFA 14 (1) : 14-1072. Fisheries resources—world.

**Anon.** (1962)

M  
8-08551

*Oceanus*, 9 (1) : 24

Captain W. Scott Bray ; Harry Wexler

Obituary.

**von Arx, W. S.** (1962)

M  
8-08552

*Oceanus*, 9 (1) : 16-7

Bigelow medal

Citation for the presentation of the H. B. Bigelow medal to Dr. J. C. Swallow.

**Day, C. G.** (1961)\*

M  
8-08553

Woods Hole Oceanographic Instn, 114 p.

A literature survey of the hydrography, bathymetry and fisheries of the Atlantic Ocean under the Atlantic missile range with an appendix on the Mona Island region

**Campbell, G. D. & D. H. Davies** (1960)

M  
8-08554

*Med. Proc.*, 6 (26) : 612-21

A case of shark attack with special reference to attempts to identify the causal species from the wounds

Ci 61-07224.

**Kang, J. W.** (1962) M  
8-08555  
*Bull. Fish. Coll. Pusan Univ.*, 4 (1/2) : 69-81  
(Korean names for marine algae in Korea). Ni

**Kwon, S. W.** (1962) M  
8-08556  
*Bull. Fish. Coll. Pusan Univ.*, 4 (1/2) : 83-101  
(A study on the legal character of the fishing right). Ni

**Aotuka, S.** (1962) M  
8-08557  
*Bull. Fac. Fish. Nagasaki*, 12 : 53-71  
(Studies on the decree of fishery-ground in Meiji). Ni

**Dziedzic, A.** (1962) MG  
8-08558  
*Cah. Biol. mar.*, 3 : 417-31  
Étude d'un compteur d'impulsions acoustiques, destiné à des mesures de rythmes d'activité biologique d'animaux marins (Study of a computer for acoustic impulsion devised to measure the rhythm of biological activity of marine animals)

Describes a new equipment.

**Marette, D.** (1962) MG  
8-08559  
*Bull. Cent. Étud. Rech. sci., Biarritz*, 3 (2) : 231-48  
Comportement à la corrosion et à la protection cathodique de l'acier immergé dans une solution saline simple en mouvement (Effect on corrosion and cathodic protection of steel when immersed in moving saline solution). En Es

**Marette, D. & M.-M. Cugnier** (1962) MG  
8-08560  
*Bull. Cent. Étud. Rech. sci., Biarritz*, 4 (1) : 77-91  
Comportement à la corrosion et à la protection cathodique de l'acier immergé dans une eau de mer naturelle en mouvement (Effect on corrosion and cathodic protection of steel when immersed in natural, moving sea water)

CR 8-08559.

**Marette, D., A. Hache & M.-M. Cugnier** (1961) MG  
8-08561  
*Bull. Cent. Étud. Rech. sci., Biarritz*, 3 (4) : 513-38  
Contribution à l'étude de la protection cathodique de l'acier immergé en eau de mer (Contribution to the study of the cathodic protection of steel immersed in sea water). En Es

The first part contains details on the mechanism of cathodic protection of ordinary steel in sea water. In the second part, the behaviour of two types of soluble anodes in the same medium was examined, the one in pure zinc, the other one in an alloy of magnesium  $\text{GA}^3\text{Z}^1$ . The advantages and drawbacks of their use are examined in each case.

**FAO. Fisheries Division (1962)**  
*World Fish. Abstr.*, 14 (1)

MF  
 8-08562

*Fr* and *Es* versions issued separately. Contains informative abstracts of Nos. 586795, 586796, 59-5395, 59-6801, 61-04911, 61-05495, 61-01691, 61-09249, 61-10393, 61-12495, 62-00442, 62-00987, 62-02147, 62-03443, 62-04954, 62-06861, 8-05297, 8-01282, 8-03326, 8-08031, 8-08245-8-08273, 8-08288, 8-08305-8-08375, 8-08465, 8-08469-8-08471, 8-08549 & 8-08550 & technological notes under headings: Canning—fish—herring, etc.; Fishery products spoilage; Fishing methods and gear—line fishing—longline—auxiliary-equipment; Fishing methods and gear—dragnets—otter trawls; Marine engines; Pearls—examination.

**de Klasz, I. (1962)**  
*Bull. Inst. franç. Afr. noire (A)*, 24 (4) : 1242-5

MF  
 8-08563

Bibliographie micropaléontologique de l'Afrique noire occidentale depuis 1950 (foraminifères et ostracodes) (Micropaleontological bibliography of western central Africa ("Afrique Noire") since 1950 (foraminifers and ostracodes))

**Bouder, H., A. Cavallo & M.-J. Bouder (1962)**  
*Bull. Inst. océanogr. Monaco*, (1240) : 66 p.

MF  
 8-08564

Poissons vénéneux et ichtyosarcotisme (Poisonous fish and ichthyosarcotism). En

Gives definitions and a historical summary and reviews the various types of fish poisoning on a world basis. In each case the aetiological, clinical, pathogenic and therapeutic problems involved are considered. They also give a list of the main toxic fish and review mussel poisoning. Bibliography.

**Anon. (1962)**  
*Science*, 137 (3535) : 1077

MF  
 8-08565

New products—Fish reaction timer

Measures interval between initiation of a stimulus and start of reaction. Equipment consists of tank with an illuminated, checker-board patterned, translucent floor, photomultiplier cell, spring operated hammer and electronic timer.

**Anon. (1962)**  
*Fish. Newslett. Aust.*, 21 (11) : 18-9, 20  
 Uniform common names

MF  
 8-08566

List of common names of Australian fishes, with scientific names.



# MISCELLANEOUS AND AUXILIARIES

**Asashina, E.** (1961)

MF  
8-08567

*Bull. Mar. biol. Sta. Asamushi*, 10 (4) : 251-6

Some notes on the mechanism of frost resistance in living animal and plant at climatic low temperature

Some general principles of cell freezing and frost injury are described from observations of the freezing process in a wide variety of plants and animals.

**Koyama, H. & K. Nakamura** (1961)

F  
8-08568

*Bull. Freshw. Fish. Res. Lab., Tokyo*, 11 (2) : 19-28

(Test of transport eggs of ugui (*Tribolodon halonensis*)). Ni En

Trials of packing materials (moss), containers, prophylactic chemicals, transportation times and temperatures.

**Wellisch, H.** (1961)\*

F  
8-08569

Tel Aviv, Water Planning for Israel Ltd., 69 p.

A selected bibliography on fluid mechanics, hydrology and hydraulic engineering

**Anon.** (1962)

F  
8-08570

*Eau, Paris*, 49 (8) : 221

A selected bibliography on fluid mechanics, hydrology and hydraulic engineering

Re 8-08569.

**Rivett, P.** (1962)

G  
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# CURRENT BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

## VOLUME 8—PART 9—REFERENCES

8-09001 to 8-09572

### GENERAL (OCEANOGRAPHY, LIMNOLOGY, AND FISHERIES)

- Saito, S.** (1961) M  
8-09001  
*Bull. Fac. Fish. Hokkaido*, 12 (1) : 9-15  
(On the error of Loran lines of position due to ground waves). Ni En

- Huxley, A.** (Ed.) (1962) M  
8-09002  
New York, G. P. Putnam's Sons, 383 p.  
Standard encyclopedia of the world's oceans and islands

Under the heading "Land and Sea" outlines the evolution of seas and land masses and the formation of islands, and describes the submarine topography, information newly acquired during the IGY (1959-60). Also discusses how the position of the seas has affected animal and vegetable development on the islands and continents. Articles describe the most important seas, islands and other features. A gazetteer supplements the articles with some 2,000 entries. Reference maps show the positions of the principal seas and islands and photographs demonstrate many aspects of sea and coast and human activities upon them. Includes a comprehensive index.

- CIESMM** (1960) M  
8-09003  
*Rapp. Comm. int. Mer Médit.*, 15 (1) : 31 p.

Plenary proceedings of meeting. Statutes as modified by the 16th general assembly. List of participants and officers of the committees; S.G.'s report and speeches of welcome, etc.; texts of resolutions.

- Villacrés, M. J. W.** (1961) M  
8-09004  
*Boll. Soc. geogr. ital.*, Ser. 9, 2 (1/3) : 106-15

Le più importanti spedizioni scientifiche nell'arcipelago delle Galapagos (The most important scientific expeditions to the Galapagos Islands). It En

Short review.

- IHB** (1962) M  
8-09005  
*Int. hydrogr. Bull.*, (3) : 88-120

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| <b>IHB</b> (1963)<br><i>Int. hydrogr. Bull.</i> , (1) : 4-24<br>Co 8-09005.   | M<br>8-09012 |
| <b>Jonsgård, A.</b> (1959)<br><i>Norsk Hvalfangst-tid.</i> , 48 (2) : 45-7<br>A new book on whales and whaling. No<br>Re 58-6828.                   | M<br>8-09013 |
| <b>Anon.</b> (1961)<br><i>Norsk Hvalfangst-tid.</i> , 50 (9) : 379-85<br>Thirteenth meeting of International Whaling Commission. No<br>Do 60-245me. | M<br>8-09014 |



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*Rep. Intergov. marit. consult. Org.*, (1962) : 26 p. 8-09015
- Goldstein, L. et al.** (1964) M  
*Comp. Biochem. Physiol.*, 12 (4) : 489-501 8-09016  
 Gill blood flow and ammonia excretion in the marine teleost, *Myoxocephalus scorpius*
- Topp, R.** (1963) M  
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 The tagging of fishes in Florida 1962 program
- Illingworth, N. et al.** (1961)\* M  
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 Fighting fins; big game fishing in New Zealand waters
- Doogue, R. B. & J. M. Moreland** (1961)\* M  
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 New Zealand sea anglers' guide
- Thompson, W. C.** (1961)\* M  
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 Physical marine sciences in Kiel and Hamburg
- CSIRO** (1962) MF  
*Rep. sci. Res. Org., Canberra*, 14, 1961-62 : 153 p. 8-09021  
 Contains summaries of advances in various research fields, lists of staff, committees and of publications of divisions, incl. that of fisheries and oceanography.
- Canada. Fisheries Development Council. Research Sub-Committee** (1961) MF  
 Vancouver, B.C. : mimeo 8-09022  
 Summaries of research on the fish-power problem and related work by fisheries agencies in British Columbia  
 Provides up-to-date index of fisheries research being done on the fish-power problem. Gives brief summary of purpose of each project, duration, location, workers, costs and statement of results.
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*Rep. Freshw. biol. Ass.*, (30) : 99 p.

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8-09024

Lists of members, and their addresses, officers, members of committees and council and staff of the FBA; accounts of the FBA; reports of the council and of the director on research activities; list of publications; contains list of limnological papers published in the British Isles in 1961, arranged by subjects, and, within these, by authors.

**The Water Research Association** (1962)

*Rep. Wat. Res. Ass.*, 7 : 43 p.

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Lists members of Council, Research Advisory Committee, research staff and visitors; membership and finances. Incl. reports of the Council Director of Research, special ref. to information and advisory services, work on biology, chemistry, hydrology, physics and plant processes, etc.

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8-09026

**Whitely, G. P.** (1960)\*

Brisbane, Jacaranda Press, 127 p.

Native freshwater fishes of Australia

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**Zoltán, K. & M. Dumitru** (1961)

*Bul. Inst. Cerc. pisc.*, 20 (4) : 43-55

Stațiunea de cercetări piscicole Tarcău (The fishculture research station at Tarcău). Ro Ru Fr

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History and scientific activities of the station's program of research in relation to Roumanian inland-water fisheries.

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Découverte d'un phénomène de remontée d'eaux profondes au sud de canal de Mozambique (Discovery of an upwelling of deep water to the south of the Mozambique Channel)

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Report (with charts and sections) of a longitudinal N-S section between the parallels of Comores and Durban.

- Niwa, M. & T. Senta** (1962) M  
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*Bull. Jap. Soc. sci. Fish.*, 28 (9) : 862-9  
 (Ecological and oceanographical studies on the purse seine fishing grounds around Oki Is. 1. The surface current in autumn, 1961). *Ni En*

Estimate of current speed by means of drift-bottles.

- Saiki, S.** (1962) M  
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 (Symposium on the radiation and fisheries problems. 2. Technique on control for the disposal of radioactive wastes, particularly on the discharge of radioactive materials into river and ocean). *Ni En*

Co 8-09332.

- Saito, K.** (1961) M  
8-09032  
*Mem. Fac. Fish. Kagoshima*, 10 : 9-14  
 Radiological survey in the Indian Ocean in 1961

Geographic location of radioactivity as found in plankton; measurement of half-life; distribution of radioactivity through organs of fish.

- Sameshima, M. & K. Saito** (1961) M  
8-09033  
*Mem. Fac. Fish. Kagoshima*, 10 : 15-22  
 (Studies on the radiological contamination of fishes, sea water and plankton in the southern region of Kagoshima Prefecture during the period from November 1959 to December 1960). *Ni En*

Identification and quantitative assessment of radioactive elements.

- Sasaki, T. et al.** (1962) M  
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*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 489-96  
 On the instrument for measuring angular distribution of underwater radiance

Ill. description of the instrument and presentation of and discussion of some results.

- Costa, F. V.** (1962) M  
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*Bol. Pesca, Lisboa*, 14 (75) : 59-70  
 As calemas do mar de Angola. Em que consistem e possibilidades de defesa (Swells of the Angola Coast. What they are and defence possibilities). *Pr*

Paper presented to the 5th national Portuguese fishery congress. Describes and discusses the origin of a special type of wave formed near the shore during periods of calm sea offshore; the phenomenon is interpreted as produced by storms and swell.

**Aubert, M., R. Chesselet & D. Nordemann** (1962)

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8-09036

*Cah. C.E.R.B.O.M.*, (2) : 23-41

Mesures de radioactivité ( $\alpha$ ,  $\beta$  &  $\gamma$ ) effectuées sur des échantillons de plancton et d'algues prélevés en Méditerranée, dans la zone côtière de la ville de Nice (Measurement of the radioactivity ( $\alpha$ ,  $\beta$  &  $\gamma$ ) of plankton and seaweed collected in the Mediterranean Sea, in the coastal zone of Nice)

**Blanc, J. J.** (1961)

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8-09037

*Rec. Trav. Sta. mar. Endoume*, (36), *Bull.* (22) : 5-12

Radioactivité des sédiments pyroclastiques sous-marins de l'Archipel du Santorin—comparaison avec quelques sédiments de Méditerranée Orientale (Radioactivity of the submarine pyroclastic sediments of the Santorin Archipelago—comparative study with other sediments from the eastern Mediterranean)

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8-09038

*Bull. Jap. Soc. sci. Fish.*, 28 (4) : 448-52

(A method for estimating the dissolved oxygen in the sea water polluted by organic matter). Ni En

Description of the method and results from its use are compared with results from use of other methods.

**Uyeda, S. et al.** (1962)

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*Oceanogr. Mag.*, 13 (2) : 185-9

9. Heat flow measurements over the Japan Trench during JEDS-4

Thermal conductivity of sediments. Issued also as: *Contr. Jap. Exped. deep Sea*, (37). Co 8-08039.

**D'Arrigo, A.** (1959)

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8-09040

*Boll. Soc. geogr. ital.*, Ser. 8, 12 (6/8) : 293

Le spiagge italiane in erosione e le antistanti valli sottomarine (The sea erosion of the Italian beaches and the corresponding underwater valleys). It En

Hints at the presence of submarine canyons as the principal causes of the erosion in the corresponding beach.

**Bonicelli Vardabaseo, S.** (1960)

M  
8-09041

*Boll. Soc. geogr. ital.*, Ser. 9, 1 (11/2) : 611-9

Recenti ricerche sulle coste della Sardegna e della Corsica (Recent investigations on the coasts of Sardinia and Corsica). It En

Points out the physio-geographical aspects of the changes which have taken place as the consequence of submergence and emergence.



**Ostenso, N. A.** (1962) M  
8-09042  
Thesis, Univ. of Wisconsin, 202 p.

Geophysical investigations of the Arctic Ocean Basin

DA 23 (4) : 1325-6. History or exploration and the development of geologic thought on the Arctic Ocean Basin is briefly reviewed. New bathymetric chart is constructed from a critical evaluation of all available data and the principal geomorphic features are described. 129 gravity stations established on arctic slope and over the adjoining Arctic Ocean by ski-equipped aircraft. Free Air and Bouguer iso-anomaly maps are presented and discussed. Airborne magnetic survey completed during April and May 1961 using a Varian nuclear-precession magnetometer mounted in a P2V-5 aircraft.

**Polli, S.** (1962) M  
8-09043  
*Pubbl. Ist. talassogr. Trieste*, 389 : 20 p.

Tabelle disprevisione delle maree per Trieste e per l'Adriatico settentrionale per l'anno 1963 (Tables of tidal forecasts for Trieste and for the northern part of the Adriatic Sea for the year 1963). *It En*

**Polli, S.** (1962) M  
8-09044  
*Rapp. Comm. int. Mer Médit.*, 16 (3) : 649-54

Il progressivo aumento del livello marino lungo le coste del Mediterraneo (The increasing height of the sea-level along the Mediterranean coasts). *It*

Issued also as: *Pubbl. Ist. talassogr. Trieste*, (390).

**Alberti, G.** (1962) M  
8-09045  
*Pubbl. Ist. talassogr. Trieste*, 391 : 11 p.

Condizioni idrologiche della parte orientale della laguna di Grado (Hydrological conditions of the eastern part of the Grado Lagoon). *It En*

Seasonal data of temperature, salinity, density *in situ*, and transparence.

**Polli, S.** (1962) M  
8-09046  
*Atti Conv. Ass. Geofis. ital.*, (11) : 343-53

Le maree ad Otranto, Manfredonia e Porto Corsini (The tides at Otranto, Manfredonia and Porto Corsini). *It En*

Monthly and seasonal tidal values are presented in order to examine the seasonal variations of the harmonic and non-harmonic tidal constants calculated after the Doodson proceeding. Issued also as: *Pubbl. Ist. talassogr. Trieste*, (392).

**Polli, S.** (1962) M  
8-09047  
*Ann. Geofis.*, 11 (1) : 69-76

Le sesse dell'Adriatico (The seiches of the Adriatic Sea). *It En*

The differential curve between the observed and the reckoned tide can be determined from the mareograms of Trieste; it is mainly composed of the seiches of the Adriatic Sea. Issued also as: *Pubbl. Ist. talassogr. Trieste*, (393).

**D'Ambrosi, C.** (1960)

M

8-09048

*Bull. Soc. adriat. Sci.*, 51 : 9-25

Recenti misure mareografiche confermerebbero il persistere di tendenze epirogeniche in Istria (Recent mareographic data seem to confirm the persistence of epirogenetic tendencies in Istria). *It*

**Faganelli, A.** (1960)

M

8-09049

*Bull. Soc. adriat. Sci.*, 51 : 45-53

Nota preliminare sulla concentrazione dei sali nutritivi rilevata nel mare Adriatico durante la crociera del 1955 (Preliminary note on the concentration of nutritive salts in the Adriatic Sea during the 1955 cruise). *It En*

Confirms scarcity in phosphorus; nitrous and ammoniacal nitrogen in concordance, nitrates in concordance with phosphorus. High values in silicate content. The sea waters near the oriental coast have different physico-chemical characteristics than those near the occidental coast.

**Chierego-Meng, N. & D. Bregant** (1960)

M

8-09050

*Bull. Soc. adriatic. Sci.*, 51 : 61-8

Analisi chimica e spettrografica preliminare di un campione di fondo dell'Adriatico centrale (Chemical and spectrographical analysis of a bottom sample taken in the central Adriatic Sea). *It En*

Results of the analysis of a 579 cm core collected at a depth of 218 m at about the centre of the Adriatic-Sea pit.

**Picotti, M. & F. Mosetti** (1961)

M

8-09051

*Bull. Soc. adriatic. Sci.*, 51 (1, N.S.) : 73-7

Actualité sur les recherches de thalassographie dans la mer Adriatique (Actual state of the thalassographic researches in the Adriatic Sea). *Fr*

Comparison between recent data on tides and ancient theories.

**Faure, L.** (1959)

M

8-09052

*Rev. Trav. Inst. Pêches marit.*, 23 (2) : 153-60

Variations de la température et de la salinité de l'eau de mer aux environs de Roscoff (Temperature and salinity variations in the waters around Roscoff)

Results of observations carried out from 1952 to 1958 to draw monthly charts and establish annual variations.

**Berthois, L.** (1959)

M

8-09053

*Rev. Trav. Inst. Pêches marit.*, 23 (2) : 225-44

Remarques sur les rides sous-marines (Remarks on submarine ridges)

Study of morphology and sediments of the ridges of the La Chapelle bank, English Channel, and theory of their formation.

M  
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**Gade, H. G. (1961)**  
*Bol. Inst. oceanogr. Univ. Oriente*, 1 (2) : 287-342

On some oceanographic observations in the southeastern Caribbean Sea and the adjacent Atlantic Ocean with special reference to the influence of the Orinoco River. Es

Results of two oceanographic cruises in Aug. 1960 and Apr. 1961, are presented and discussed. The main objectives have been to determine the course and influence of the Orinoco River water after being discharged into Atlantic and Caribbean waters.

M  
8-09055

**Gade, H. G. (1961)**  
*Bol. Inst. oceanogr. Univ. Oriente*, 1 (2) : 359-95

Further hydrographic observations in the gulf of Cariaco, Venezuela. The circulation and water exchange. Es

M  
8-09056

**Anon. (1962)\***  
TID-14390 : 15 p.

Research on the marine geology and biology of Tomales Bay, California

Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

M  
8-09057

**Wangersky, P. J. (1961)\***  
ORO-449 : 4 p.

The sedimentation of manganese in the open ocean

Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

M  
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**Howe, M. R. (1962)\***  
TID-14996 : 26 p.

Some direct measurements of the non-tidal drift on the continental shelf between cape Cod and cape Hatteras

Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

M  
8-09059

**Krylov, Yu. M. (Miller, J., Transl.) (1959)**  
12 p.

The relation between steepness and age of wind waves

En 59-3428. A functional relationship between mean heights and mean periods of waves in a storm region was established theoretically and checked by actual measurement data. Available from the Library of Congress, Washington, D.C.

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- Ozmidov, R. V. (1959)**  
JPRS : 6 p.

The calculation of a turbulent horizontal diffusion of admixture spots in a sea

*En* 583250 The equation of the horizontal turbulent diffusion is written in the form which indicated that the peripheral zones of an admixture spot that are most remote from each other are scattered by turbulent vortices more rapidly than are the central regions of the spot.

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- Ruellan, F. & Y. Beigbeder (1963)**  
*C.R. Acad. Sci., Paris*, 256 (7) : 1566-9

Quelques observations préliminaires sur la répartition des sédiments sous-marins en baie de Saint-Brieuc (Côtes-du-Nord) (Some preliminary observations on the marine sediments distribution in the bay of Saint-Brieuc)

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- NAS (US) Committee on Effects of Atomic Radiation on Oceanography & Fisheries (1959)\***  
*Publ. nat. Acad. Sci., Wash.*, (658) : 52 p.

Considerations on the disposal of radioactive wastes from nuclear-powered ships into the marine environment; a report

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- Washington (State) Department of Fisheries (1960)\***  
*Res. Bull. Wash. Dep. Fish.*, (6) : 161 p.

Reports on sulfite waste liquor in a marine environment and its effect on oyster larvae

- M  
8-09064
- Donovan, D. T. & A. H. Stride (1961)**  
*Phil. Trans. (B)* : 244 (712) : 299-300

An acoustic survey of the sea floor south of Dorset and its geological interpretation

- M  
8-09065
- Parker, P. L. (1962)**  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 75-9  
Zinc in a Texas bay

Using a dithizone method for organisms and sediment and a lanthanum precipitation for sea water, concentrations of zinc were determined in the water (8-15 ppb), sediments (10-18 ppm), underwater plants (60-100 ppm), and animals (9-130 ppm) predominating in the grass flats of Redfish Bay, a shallow marine estuary near Port Aransas, Texas.

- M  
8-09066
- Volkman, C. M. & C. H. Oppenheimer (1962)**  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 80-96

The microbial decomposition of organic carbon in surface sediments of marine bays of the central Texas Gulf coast

Studies were made of 28 sediment profiles over a period of eight months in a shallow marine lagoon, Redfish Bay, near Aransas Pass, Texas. Organic carbon, bacterial populations, forty-day rates of organic carbon decomposition, sediment grain size and texture were measured in the cores from five stations.



- Hellier, T. R., Jr. & L. S. Kornicker** (1962) M  
8-09067  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 212-5  
 Sedimentation from a hydraulic dredge in a bay

Red gravel was used to mark the bay sediment surface at five stations in turtle grass flats near Aransas Pass, Texas, prior to the dredging of an intra-coastal waterway. Cores were taken and sediments were studied before, one week after dredging, and 18 months later, 22 to 27 cm of sediment (11 to 55% silt-clay) were deposited within 0.5 mile of the dredge, but effects at greater distance were negligible. Little sediment sorting was observed during dredging.

- California. University. Scripps Institution of Oceanography** M  
8-09068  
 (1960)\*  
 SIO Ref. 61-14

Surface water temperatures at shore stations, United States west coast and Baja California, 1960

- Jones, B. L.** (1962)\* M  
8-09069  
*Tech. Notes U.S. Bur. Stand.*, (155) : 26 p.  
 The energy parameter B for strong blast waves.

- Armstrong, F. A. J. & E. I. Butler** (1963) M  
8-09070  
*J. Mar. biol. Ass. U.K.*, 43 (1) : 75-8  
 Chemical changes in sea water off Plymouth in 1961

The results of analysis of sea water samples from the International Hydrographic Station E I (50° 02' N, 4° 22' W) are given in graphical form and as integral mean values for the water column of 70 m.

- Muraour, P., J. Merle & J. Ducrot** (1962) MG  
8-09071  
*Bull. Inst. océanogr. Monaco*, (1245) : 21 p.

Étude séismique par réfraction dans le golfe du Lion (Seismic refraction study in the Lion Gulf). En

Measurements made on the continental shelf determined the presence of four layers. The large continental shelf in the occidental Mediterranean Basin is due both to the presence of the secondary limestones and to the configuration of the granitic basement.

- Miyoshi, H., T. Shirai & H. Kadota** (1962) MF  
8-09072  
*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 534-9

(Identification and determination of organic acids in marine and lake sediments). Ni En

Presents a method for extraction, identification and determination of these acids and, using this method, reports on acids in sediments in Maizuru Bay and lake Biwa, with observation on variation in concentration with depth from sediment surface.

**Oguro, M.** (1961)

MF

8-09073

*Bull. Fac. Fish. Hokkaido*, 12 (1) : 81-7

(Chemical studies on the current rip in Ishikari Bay caused by the Ishikari River flowing into that bay. 2. On the distribution of marine humus contents). *Ni En*

Co 8-09074.

**Oguro, M.** (1961)

MF

8-09074

*Bull. Fac. Fish. Hokkaido*, 12 (1) : 71-80

(Chemical studies on the current rip in Ishikari Bay caused by the Ishikari River flowing into that bay. 1. On the soluble organic matter). *Ni En*

Variation in amount of organic matter with depth and with distance from river mouth.

**Robini, V., M. Roulet & J. Gaissa** (1962)

MF

8-09075

*Cah. C.E.R.B.O.M.*, (2) : 45-57

La controle de la salubrité des coquillages (Control of the edibility of shellfish)

Comments on the French legislation and reviews biotic and abiotic pollution.

**Milo de Villagrazia, P.** (1962)

MF

8-09076

*Boll. Pesca Piscic. Idrobiol.*, 16 (1) : 5-52

Ricerche fisico-chimiche e biologiche sui laghi salmastri pontini in relazione alla produttività. Il lago di Sabaudia. (a) Idrografia e condizioni fisico-chimiche (Physico-chemical and biological researches of the Pontine brackish lagoons in relation to their productivity. The lake of Sabaudia. (a) Hydrography and physico-chemical conditions). *It Fr En*

Gives temperature, oxygen and pH seasonal variations. Compared to the lake's condition 20 years ago, the situation has improved.

**Magaudde-Borzi, L. & F. Li Greci** (1962)

MF

8-09077

*Atti Soc. Pelor.*, 7 (3/4 Suppl.) : 763-8

La colimetria delle acqua dei laghi di Faro e di Ganzirri e delle sponde di mare antistanti, nei periodi di stabulazione dei mitili (Colimetric determinations in the waters of the Faro and Ganzirri lakes and of the sea waters in front of them during the stabulation of the mussels.) *It*

Results show highly polluted water.

**Genovese, S.** (1962)

MF

8-09078

*Atti Soc. Pelor.*, 8 (1/2) : 65-72

Sulle condizioni chimico-fisiche dello stagno di Faro in seguito all'apertura di un nuovo canale (Chemico-physical conditions of the lake of Faro in relation to the opening of a new channel). *It En*

The water of the lake has been remarkably modified.

- Kato, K.** (1961) MF  
8-09079  
*Bol. Inst. oceanogr. Univ. Oriente*, 1 (2) : 343-58  
Some aspects on biochemical characteristics of sea water and sediments in Mochima Bay, Venezuela. Es

Examines the relationship between organic sedimentation and the biochemistry and hydrography of the bay.

- Sauberer, F.** (1962) MF  
8-09080  
*Mitt. int. Verh. Limnol.*, (11) : 77 p.  
Empfehlungen für die Durchführung von Strahlungsmessungen an und in Gewässern (Recommendations for conducting radiation measurements at and in bodies of water)

A review of two subject and positive recommendations as part of the IAL's limnological methods series.

- A.C.H.** (1962) F  
8-09081  
*Piscator*, 16 (54) : 2-5  
Water pollution. Regional standards for industrial effluents

Lists standards in Cape Province, South Africa, applicable to waste water or effluents so as to minimize injury to fish or fish foods.

- Jubb, R. A.** (1962) F  
8-09082  
*Piscator*, 16 (54) : 7  
The biology of polluted waters  
Re 61-00218.

- Hanks, R. W.** (1962) MF  
8-09083  
*Progr. Fish-Cult.*, 24 (3) : 137-8  
A mounting device for recording instruments

Describes a support for a thermograph for installation on coastal areas which will resist damage by violent coastal storms and movements of heavy ice masses.

- Kashiwada, K. & D. Kakimoto** (1962) F  
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# PLANKTON

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These spp. are present in the bay of Genoa: *E. stricta*, *E. graminea*, *E. cavolinii* and *E. verrucosa*. Ecological and biological remarks.

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 (Catalogue of types of Pelecypoda at the Oceanographic Museum of Monaco)

Ci 1897 Dautzenberg, P. & H. Fischer; 1906 Dautzenberg, P. & H. Fischer; 1912 Dautzenberg, P. & H. Fischer; 1925 Dautzenberg, P.; 1927 Dautzenberg, P. The collections include 33 types of genera—*Monia*, *Isomon**ia*, *Chlamys*, *Amussium*, *Arca*, *Pectunculus*, *Leda*, *Venus*, *Anaitis*, *Malletia*, *Thyasira*, *Diplodonta*, *Phacoides*, *Arcopagia*, *Syndesmya*, *Cuspidaria*, *Verticordia*, *Thracia*, *Poromya*.

- Azis, K. M. S. & H. J. Humm** (1962) M  
8-09164  
*J. Elisha Mitchell sci. Soc.*, 78 (1) : 55-63  
 Additions to the algal flora of Beaufort, N.C., and vicinity

B Agr. 26 (11) 86531.

- Javornicky, P.** (1962) M  
8-09165  
*Preslia*, 34 (1/2) : 98-113  
 Two scarcely known genera of the class Dinophyceae: *Bernardinium* *chodat* and *Crypthocodinium* *biecheler*

B Agr. 26 (11) 86536.

- Sarà, M.** (1960) M  
8-09166  
*Ann. Ist. Zool. Univ. Napoli*, 11 (2) : 1-8  
 Considerazioni sulla distribuzione ed ecologia dei Poriferi nelle grotte  
 (Considerations on the distribution and ecology of Porifera in grottoes).  
*It Fr*

- Sarà, M.** (1960) M  
8-09167  
*Ann. Ist. Zool. Univ. Napoli*, 11 (5) : 11-6  
*Pseudotrachya oxystyla* n. sp. (Demospongiae) e suo rinvenimento nella  
 zona litorale dell'isola d'Ischia (*Pseudotrachya oxystyla* n. sp. (Demospongiae)  
 found in the littoral zone of Ischia). *It En*

Describes the second species of the genus *Pseudotrachya*. The finding of this species is of ecological and of zoogeographical interest.



**Sarà, M.** (1960) M  
8-09168  
*Ann. Ist. Zool. Univ. Napoli*, 11 (7) : 1-22

Specie nuove di Demospongia provenienti da acque superficiali del golfo di Napoli (New species of Demospongiae from the surface waters of the bay of Naples). *It En*

Describes 6 new spp., *Nethea dissimilis*, *Triptolemus simplex*, *Cliona copiosa*, *Crella nodulosa*, *Microciona toxivaria* and *Microciona toxistyla*; all found at a depth of 0.1 metre.

**Sarà, M. & L. Siribelli** (1961) M  
8-09169  
*Ann. Ist. Zool. Univ. Napoli*, 12 (3) : 1-39

La fauna di Poriferi delle secche del golfo di Napoli. 1. La secca della Gaiola (The Porifera fauna of the shoals of the bay of Naples. 1. The shoal of the Gaiola). *It En*

86 spp. were found: 60 from the pebbly zone and 41 from the rocky environment. 14 spp., of which 13 are from the pebbly zone, have been described for the first time. Ecological observations.

**Sarà, M.** (1961) M  
8-09170  
*Ann. Ist. Zool. Univ. Napoli*, 12 (4) : 1-7

*DIACTINOLOPHA* genere nuovo di Plakinidae per *D. moucharmonti* sp. n. rinvenuta nel golfo di Napoli (*DIACTINOLOPHA moucharmonti* new genus and new species of Plakinidae (Demospongiae) found in the bay of Naples). *It En*

Describes and discusses the similarities between the genera *Diactinolopha* and *Placynolopha*.

**Siribelli, L.** (1961) M  
8-09171  
*Ann. Ist. Zool. Univ. Napoli*, 12 (4) : 1-12

Le *Microciona* (Demospongiae) del golfo di Napoli (The *Microciona* (Demospongiae) of the bay of Naples). *It En*

Taxonomic data of 14 spp. are summarized. Their diagnostic characters have been compared and their affinities discussed.

**Renzoni, A.** (1962) M  
8-09172  
*Boll. Pesca Piscic. Idrobiol.*, 16 (1) : 67-86

Comportamento di *Mytilus galloprovincialis* Lamk. e *Ostrea edulis* L. (Larve e adulti) in differenti condizioni ambientali sperimentali (Behaviour of *Mytilus galloprovincialis* Lamk. and *Ostrea edulis* L. (Adults and larvae) in different experimental environmental conditions). *It Fr En*

They all show considerable adaptability to variations of temperature and salinity, but low temperatures are always better tolerated than high ones (above 25°C). The optimum salinity for development corresponds to the average salinity of the sea or slightly lower salinity.

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**Genovese, S.** (1962)

M

8-09173

*Atti Soc. Pelor.*, 8 (1/2) : 47-64

La batteriologia marina e i suoi problemi (Marine bacteriology and its problems). *It*

Conference held in the Zoological Station of Naples on 12 Mar. 1962.

**De Vincentiis, M.** (1962)

M

8-09174

*Atti Soc. Pelor.*, 8 (1/2) : 189-98

Ulteriori indagini istospettrografiche e citochimiche su alcuni aspetti dell'ovogenesi di *Ciona intestinalis* (Further histospectrographical and cytochemical researches on the oogenesis of *Ciona intestinalis*). *It* En

**Bruni, A. & G., & G. Lamonica** (1962)

M

8-09175

*Atti Soc. Pelor.*, 8 (1/2) : 225-33

Cultura massiva di alghe. Nota 5. Sulla presenza di un fattore ostacolante la produzione di pigmento (APF) di *Serratia marcescens* in estratti di *Scenedesmus quadricauda* (Massive algal culture. Note 5. On the presence of an inhibiting factor for the pigment production (APF) in *Serratia marcescens* in *Scenedesmus quadricauda* extracts). *It* En

The proof of the presence of an anti-pigmentation factor (APF) might be useful as an indirect way to show the toxic action of algal extracts.

**Kestner, F. J. T.** (1962)

M

8-09176

*Geogr. J.*, 128 (4) : 457-78

The old coastline of the Wash

Describes how various old salt-marsh edges were traced as part of a field study into the processes of salt-marsh advance in this area and establishes that salt-marsh advance is not a continuous process, but that foreshore saltings tend to become stabilized.

**Choe, S.** (1963)

M

8-09177

*Nature, Lond.*, 197 (4864) : 306-7

Daily age markings on the shell of cuttlefishes

**Choe, S.** (1963)

M

8-09178

*Nature, Lond.*, 197 (4864) : 307

Rearing of cuttlefishes and squids

Gives details of techniques for rearing 3 spp. of cuttlefish: *Sepia esculenta* Hoyle, *Sepia subaculeata* Sasaki, *Sepiella maindroni* de Rochebrune; and 2 spp. of squid: *Sepioteuthis lessoniana* Lesson and *Euprymna beryii* Sasaki.

**Hagiwara, S. & K. Naka** (1964)

M

8-09179

*J. gen. Physiol.*, 48 (1) : 141-63

The initiation of spike potential in barnacle muscle fibers under low intracellular  $Ca^{++}$

- Pourriot, R.** (1963) M  
8-09180  
*C.R. Acad. Sci., Paris*, 256 (7) : 1603-5  
 Utilisation des algues brunes unicellulaires pour l'élevage des Rotifères  
 (Utilisation of brown unicellular algae for cultivation of rotifers)
- Preliminary note reporting results of cultivation experiments of *Gastropus*,  
*Epiphanes*, *Synchaeta*, *Polyarthra* and *Keratella*, using *Synura* sp. and *Cryptomonas curvata*.
- Tchernigovtzeff, C.** (1963) M  
8-09181  
*C.R. Acad. Sci., Paris*, 256 (7) : 1611-3  
 Sur l'évolution de la crise miotique épithéliale chez *Leander serratus*  
 (Pennant) Crustacé Décapode (On the evolution of the epithelial myotic  
 crisis in *Leander serratus* (Pennant) Crustacea, Decapoda)
- Ci 59-1407. Preliminary note.
- Colebrook, J. M. et al.** (1963)\* M  
8-09182  
*Bull. mar. Ecol.*, 6 (2)  
 Continuous plankton records: contributions towards a plankton atlas of the  
 north-eastern Atlantic and the North Sea
- Quayle, D.** (1960)\* M  
8-09183  
*Handb. B.C. Mus.*, (17) : 104 p.  
 The intertidal bivalves of British Columbia
- Tomlinson, J. T. & W. A. Newman** (1960)\* M  
8-09184  
*Proc. U.S. nat. Mus.*, 112 (3445) : 517-26  
*Lithoglyptes spinatus*, a burrowing barnacle from Jamaica
- Uchio, T.** (1960)\* M  
8-09185  
*Biol. Results Jap. antarct. Exped.*, (12) : 19 p.  
 Benthonic Foraminifera on the Antarctic Ocean
- Fell, H. B.** (1961) M  
8-09186  
*Mem. N.Z. oceanogr. Inst.*, (18) : 79 p.  
 The fauna of the Ross Sea. Part 1. Ophiuroidea
- Oppenheimer, C. H. & H. W. Jannasch** (1962) M  
8-09187  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 56-60  
 Some bacterial populations in turbid and clear sea water near port Aransas,  
 Texas

Direct counts were made of bacteria in clear and turbid sea waters including waters of the Gulf beach, the Laguna Madre, and the Redfish Bay turtle grass areas. Counts ranged from 900,000 per ml outside the Gulf surf to 28,800,000 in turbid water along the shore of Redfish Bay. Counts were used to estimate bacterial biomass (0.2 to 6 g/m<sup>3</sup>) and potential oxygen demand.

- M  
8-09188
- Sorenson, L. O. & J. T. Conover** (1962)  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 61-74  
 Algal mat communities of *Lyngbya confervoides* (C. Agardh) Comont
- Studies of ecology, zonation, and growth were made of the extensive mats in the shallow lagoonal flats of bays in south Texas. Five zones were described in vertical profile, and microphotographs were made of representative filaments, include Zone A at the surface with dark sheaths, Zone C with thick clear sheaths, and Zone E with thin sheaths and contracted protoplasts.
- M  
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- Gifford, C. A.** (1962)  
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 Some aspects of osmotic and ionic regulation in the blue crab, *Callinectes sapidus*, and the ghost crab, *Ocypode albicans*
- Analyses were made of constituents of body fluids in the ghost crab, and the blue crab, relative to hypo- and hypersaline environments in the bays of south Texas. Blood and urine concentrations of Na, K, Ca, Mg, Cl, and SO<sub>4</sub> are given for *Ocypode albicans* in concentrations from 14 to 197 per cent sea water (% S.W.).
- M  
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- Lee, B. D. & W. N. McFarland** (1962)  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 126-42  
 Osmotic and ionic concentrations in the mantis shrimp *Squilla empusa* Say
- Osmotic and ionic concentrations of body fluids and muscle were analyzed as a function of environmental salinity.
- M  
8-09191
- Humm, H. J. & H. H. Hildebrand** (1962)  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 227-68  
 Marine algae from the Gulf coast of Texas and Mexico
- An annotated list of 193 spp. is given as a result of collections made along the coast of the Gulf of Mexico between Rockport, Texas, and the southern part of the state of Vera Cruz, Mexico. One hundred and sixteen of these spp. were recorded for Texas and 140 for Mexico.
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8-09192
- Rice, W. H. & L. S. Kornicker** (1962)  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 366-93  
 Mollusks of Alacran Reef, Campeche Bank, Mexico
- Photographic plates and descriptions are given for a collection of 90 spp. of gastropods and 40 spp. of pelecypods, to aid in further study of the Campeche Bank.
- M  
8-09193
- Yaldwyn, J. C.** (1961)\*  
*Rec. Dom. Mus., Wellington*, 4 (1) : 6 p.  
 A scyllarid lobster, *Arctides antipodarum* Holthuis, new to New Zealand waters



- Southward, A. J. & E. C. Southward** (1963) M  
8-09194  
*J. Mar. biol. Ass. U.K.*, 43 (1) : 57-64  
 Notes on the biology of some Pogonophora

Observations on living pogonophores obtained from the continental slope to the south-west of the British Isles and from the continental shelf off the west coast of Ireland.

- Millar, R. H.** (1963) M  
8-09195  
*J. Mar. biol. Ass. U.K.*, 43 (1) : 71-4  
 The development and larva of *Styela coriacea* (Alder and Hancock)

Larvae of this ascidian were obtained by artificial fertilization and from an incubating adult.

- Kain, J. M.** (1963) M  
8-09196  
*J. Mar. biol. Ass. U.K.*, 43 (1) : 129-51  
 Aspects of the biology of *Laminaria hyperborea*. 2. Age, weight and length

- Patel, S. & C. P. Spencer** (1963) M  
8-09197  
*J. Mar. biol. Ass. U.K.*, 43 (1) : 167-75  
 The oxidation of sulphide by the haem compounds from the blood of *Arenicola marina* L.

- Barnes, H., M. Barnes & D. M. Finlayson** (1963) M  
8-09198  
*J. Mar. biol. Ass. U.K.*, 43 (1) : 181-91  
 The metabolism during starvation of *Balanus balanoides*

- Barnes, H., M. Barnes & D. M. Finlayson** (1963) M  
8-09199  
*J. Mar. biol. Ass. U.K.*, 43 (1) : 193-219  
 The seasonal changes in body weight, biochemical composition, and oxygen uptake of two common boreo-arctic cirripedes, *Balanus balanoides* and *B. balanus*

- Kawabata, T., T. Yoshida & Y. Kubota** (1962) MF  
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*Bull. Jap. Soc. sci. Fish.*, 28 (3) : 344-51  
 Paralytic shellfish poison. 1. A note on the shellfish poisoning occurred in Ofunato City, Iwate Prefecture, in May, 1961

Epidemiological features of the outbreak assay of toxicity; discussion of the change in toxicity and the source of the poison.

**Shibata, T. & K. Yoshimura** (1962)

MF  
8-09201

*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 514-7

(Enzymatic studies on the muscle of aquatic animals. 4. Limiting step in aerobic FDP glycolysis and the formation of  $\alpha$ -glycerophosphate in fish and mollusk muscle)

Enzyme solutions prepared from skeletal muscle of two carps, mantle of squid and adductor muscle of pecten. Examination of the effect of 3-phosphoglyceric acid on aerobic glycolysis and of the formation of  $\alpha$ -glycerophosphate. Co 8-09337.

**Gross, W. J.** (1961)

MF  
8-09202

*Biol. Bull., Woods Hole*, 121 (2) : 290-301

Osmotic tolerance and regulation in crabs from a hypersaline lagoon

CR 61-12815. Investigation concerned with ionic and osmotic regulation in *Hemigrapsus* and *Pachygrapsus* collected from Los Penasquitos lagoon during the period when the lagoon remained isolated from the open sea.

**Navaz, J. M.** (1962)

MF  
8-09203

*Industr. pesq., Vigo*, 36 (841/842) : 145

La explotación ostrícola de la Ria de Vigo (On oyster exploitation in the Ria de Vigo)

Short note discussing the possible causes of the disappearance of oysters in the Galician Sea.

**Sanchez, M. & Y. Sanchez** (1962)

MF  
8-09204

*Industr. pesq., Vigo*, 36 (841/842) : 143

La ostra portuguesa en las Rias Gallegas (Portuguese oysters in the Rias Gallegas)

Brief information about the progressive disappearance of *Crassostrea angulata* in the last few years.

**Reys, S.** (1961)

MF  
8-09205

*Rec. Trav. Sta. mar. Endoume*, (36), *Bull.* (22) : 53-109

Recherches sur la systématique et la distribution des Ostracodes de la région de Marseille (Research on the systematics and distribution of the Ostracoda from the Marseille region)

List of spp. (including the description of some n. spp.) of different sand biotopes. Contains observations on the characteristics of the biotope and the ecology of the spp. including seasonal variations.

- Tomiyana, T., K. Kobayashi & K. Kawabe** (1962) MF  
8-09206  
*Bull. Jap. Soc. sci. Fish.*, 28 (3) : 383-6

(The toxic effect of pentachlorophenolate, a herbicide, on fishery organisms in coastal waters. 2. The effect of PCP on *Conchoelis*). *Ni En*

Experimental determination of the effect of PCP as evidenced by change in outer appearance, succino-dehydrogenase activity, and rate of  $^{32}\text{P}$  uptake. Co 8-09461.

- Toriumi, M. & M. Kato** (1961) MF  
8-09207  
*Bull. Mar. biol. Sta. Asamushi*, 10 (4) : 231-6

Preliminary report on the micro-fauna and flora among the mosses come from the Ongul Islands.

Numbers of algae, Protozoa and other animals associated with different species of moss. Issued also as: *Contr. Mar. biol. Sta. Asamushi*, (286).

- Harrod, J. J. & R. E. Hall** (1962) MF  
8-09208  
*Hydrobiologia*, 20 (2) : 173-8

A method for determining the surface areas of various aquatic plants. *Fr*

- Vacelet, E.** (1961) MF  
8-09209  
*Rec. Trav. Sta. mar. Endoume*, (36), *Bull.* (22) : 13-9

Les Ciliés de la microfaune des sables mal calibres des environs de Marseille (Ciliata from the microfauna in sand of unusual mass properties)

- Spain. Instituto Nacional de Estadística** MF  
8-09210  
*Estadist. industr. Ind. deriv. Pesca, Madr.*, 1960, 150 p.

Data on Spanish plants, manpower, fish products, raw materials.

- Lund, J. W. C.** (1962) MF  
8-09211  
*Preslia*, 34 (1/2) : 140-6

Unsolved problems in the classification of the non-motile Chrysophyceae with references to those in parallel groups

BAgr. 26 (11) 86539.

- Sarà, M.** (1961) MF  
8-09212  
*Ann. Ist. Zool. Univ. Napoli*, 12 (1) : 1-10

Osservazioni sulla composizione, ecologia e differenziamento della fauna di Poriferi di acqua salmastra (Observations on the composition, ecology and differentiation of the fauna of brackish water Porifera). *It En*

The features of the sponge fauna of the Mediterranean lagoons of Thau and Venice are compared with those of the Indian Chilka Lake. The habitus and spicular modifications of some species are discussed.

MF

8-09213

**Genovese, S., C. Rigano & M. La Cava** (1962)*Atti Soc. Pelor.*, 8 (1/2) : 101-14

Osservazioni sulla distribuzione verticale della flora batterica nello stagno salmastro di Faro (Observations on the vertical distribution of the bacterial flora in the waters of the brackish lake of Faro). *It En*

Exposes results of observations on the vertical distribution of aerobes, anaerobes and sulphate reducing bacteria in relation to the environmental conditions.

MF

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**Loewus, M. W. & C. C. Delwiche** (1963)*Plant Physiol.*, 38 : 371-4

Carbon monoxide production by algae

WPA 37 (3) 397. Discusses with respect to the brown alga, *Egrecia menzies*, and others, and the higher plants.

MF

8-09215

**Duchâteau-Bosson, G. & M. Florkin** (1961)*Comp. Biochem. Physiol.*, 3 : 245-9

Change in intracellular concentration of free amino acids as a factor of euryhalinity in the crayfish *Astacus astacus*

IABS 25 (3) 5636. *A. astacus* survives in 25% sea water and maintains the osmotic concentration of the blood at a higher level than that of diluted sea water. The degree of hydration and the K content of the abdominal muscle show only slight modification. The adaptation, which enables survival for up to 3 months, results from an increase of intracellular concentration, partly due to increase in free amino acids.

MF

8-09216

**Kubo, T.** (1959)*Sci. Rep. Hokkaido Salm. Hatch.*, (14) : 15-9

(A preliminary study of the effects of environmental factors upon the attainment of the smolt stage in juvenile masu salmon). *Ni En*

Examination of the effect of light, temperature and water depth on the osmoconcentration of the blood of metamorphosing fish.

M

8-09217

**Chew, K. K.** (1960)*Spec. sci. Rep. U.S. Fish Wildl. Serv., Fish.*, (365) : 27 p.

Study of food preference and rate of feeding of Japanese oyster drill *Ocenebra japonica* (Dunker)

Two 70-day experiments on drills presented with a variety of possible food lamellibranchs.

MF

8-09218

**Boaden, P. J. S.** (1963)*J. Mar. biol. Ass. U.K.*, 43 (1) : 79-96

The interstitial fauna of some north Wales beaches

Lists over 100 spp., mostly new records for Britain, found in the interstices of sand and shell gravel from north Wales beaches. The distribution of this fauna in relation to the substrate is discussed and species typical of fine-medium- and coarse-particled substrates are listed.



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*J. Mar. biol. Ass. U.K.*, 43 (1) : 97-112  
Adaptations of two intertidal isopods. 2. Comparison between *Campeopea hirsuta* and *Naesa bidentata* (Sphaeromatidae)
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*J. Mar. biol. Ass. U.K.*, 43 (1) : 125-8  
Studies on the physiology of digestion in *Corophium volutator*
- Boaden, P. J. S.** (1963) MF  
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*J. Mar. biol. Ass. U.K.*, 43 (1) : 239-50  
Behaviour and distribution of the archiannelid *Trilobodrilus heideri*
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*Malay. Nat. J.*, 16 (3) : 126-44  
Water-fleas  
Ill. popular account of appearance, anatomy, reproduction and life-history, food and feeding habits, coloration and distribution. Key to Malayan spp.
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*Science*, 137 : 682-3  
Physiology of acclimation to low temperature in poikilotherms  
CA 57 (11) : 14304. It was found that K, Na, and Ca increase and Cl, Mg, and free amino acids decrease in cold acclimated fresh-water mussels.
- Nemer, M.** (1962) M  
8-09224  
*Biochem. biophys. Res. Commun.*, 8 (6) : 511-5  
Interrelation of messenger polyribonucleotides and ribosomes in the sea urchin egg during embryonic development  
CA 57 (11) : 14307.
- Aubry, R.** (1961) F  
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A study of hermaphrodism and of the pharmacodynamic action of vertebrate hormones in gastropods  
CA 57 (12) : 15628.
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*Acta. biol. Acad. Sci. hung.*, 12 (2) : 99-106  
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CA 57 (12) : 15631.

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CA 57 (12) : 16532.
- Jaeger, C. P.** (1962) F  
8-09228  
*Comp. Biochem. Physiol.*, 6 : 243-5  
Physiology of Mollusca. 2. Action of serotonin and other amines on the heart of *Strophocheilos oblongus*  
CA 57 (12) : 15632.
- Barek, I. B.** (1961) F  
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*Biol. Kozlemen.*, 9 : 163-6  
Histochemical investigations of fresh water planaria  
CA 57 (7) : 9015.
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*Mem. Inst. sci. Madagascar, (F)*, 4 : 161-5  
Die Reptantia der Österreichischen Madagaskar—Expedition 1958 (Reptantia from the Austrian Madagascar Expedition, 1958)  
List, with description (ill.) of *BOTTIA madagascariensis neticulata*, n. subsp. and erection of a new genus: *BOTTIA*.
- Dayal, R. & R. N. Tandon** (1962) F  
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*Hydrobiologia*, 20 (2) : 121-7  
Ecological studies of some aquatic Phycomycetes
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*Hydrobiologia*, 20 (2) : 167-72  
A bottom sampler for soft mud
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*Preslia*, 34 (1/2) : 176-89  
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BAgr. 26 (11) 86543.

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 BAgr. 26 (11) 87137.
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*Explor. Parc nat. Albert.*, 11 : 89-94  
 (Observations on the microflora and the microfauna of the lakes of Ruwen-  
 zori and of Visoke). *Fr*  
 BAgr. 26 (11) 87189.
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8-09239  
*R.C. Ist. lombardo, (B)*, 93 (1) : 47-9  
 La costante di sedimentazione dell'actina di gambero (The sedimentation  
 constant of actin extracted from crayfish). *It En*  
 The sedimentation constant of the *Potamobius fluviatilis* actin, is of 2.62.5.
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 researches of the ovogenesis in polyclads). *It*  
 Studies made on *Thysanozoon brocchi* Grube and *Pseudoceros velutinus*  
 Lareg.
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*Bull. Jap. Soc. sci. Fish.*, 28 (6) : 616-22  
(Studies on ashi of kamaboko. 13. Changes in viscosity of fish muscle sol during heating). *Ni En*
- X  
8-09340
- Shimizu, Y., H. Yeshimoto & W. Simidu** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (6) : 610-5  
(Studies on ashi of kamaboko. 12. Fall in gel-strength of kamaboko during cooking). *Ni En*
- X  
8-09341
- Sone, H.** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (3) : 361-6  
(Studies on utilization of oils and fats obtainable from viscera of aquatic animals. 4. Investigations in industrial aspect of concentration by molecular distillation of vitamin oil. Pt. 2). *Ni En*
- X  
8-09342
- Sone, H.** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (4) : 435-40  
(Studies on utilization of oils and fats obtainable from viscera of aquatic animals. 5. Investigation of industrial adoptability of the esterification method for concentrating vitamin A. Pt. 1). *Ni En*
- X  
8-09343
- Sone, H.** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (4) : 441-4  
(Studies on utilization of oils and fats obtainable from viscera of aquatic animals. 6. Investigation of industrial adoptability of the esterification method for concentrating vitamin A. Pt. 2). *Ni En*



# FISHING

**Sone, H. (1962)** X  
8-09344  
*Bull. Jap. Soc. sci. Fish.*, 28 (2) : 235-43

(Studies on utilization of oils and fats obtainable from viscera of aquatic animals. 3. Investigations in industrial aspect of concentration by molecular distillation of vitamin oil (Pt. 1). Ni En

**Sone, H. (1962)** X  
8-09345  
*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 77-84

(Studies on utilization of oils and fats obtainable from viscera of aquatic animals. 2. Investigations of process for manufacturing vitamin oil from viscera of aquatic animals. Pt. 2. Examination of the methods in getting oils by solvent extraction of viscera). Ni En

**Sone, H. (1962)** X  
8-09346  
*Bull. Jap. Soc. sci. Fish.*, 28 (7) : 702-8

(Studies on utilization of oils and fats obtainable from viscera of aquatic animals. 8. Extraction of polyunsaturated fatty acids in a concentrated state and serum cholesterol reductive action of the extraction product on the rat fed therewith). Ni En

**Sone, H. (1962)** X  
8-09347  
*Bull. Jap. Soc. sci. Fish.*, 28 (7) : 695-701

(Studies on utilization of oils and fats obtainable from viscera of aquatic animals. 7. Studies on the stability of vitamin A as variable with the process of concentrating vitamin oil). Ni En

**Sone, H. (1961)** X  
8-09348  
*Bull. Jap. Soc. sci. Fish.*, 27 (12) : 1100-6

(Studies on utilization of oils and fats obtainable from viscera of aquatic animals. 1. Investigations of process for manufacturing vitamin oil from viscera of aquatic animals. Part 1. Examination of the working conditions in getting oils by alkali digestion of viscera). Ni En

**Tanikawa, E., M. Akiba & J. Yamashita (1962)** X  
8-09349  
*Bull. Fac. Fish. Hokkaido*, 12 (4) : 293-308

Chemical studies on the meat of abalone (*Haliotis discus hannai* Ino) 2.

Extraction of a mucoprotein and detection of the kinds of carbohydrates by paper chromatography. Also considers decomposition of the abalone meat.

**Tanikawa, E. & J. Yamashita (1961)** X  
8-09350  
*Bull. Fac. Fish. Hokkaido*, 12 (3) : 210-38

Chemical studies on the meat of abalone (*Haliotis discus hannai* Ino). 1.

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- Tomiyama, T.** (1962) X  
8-09351  
*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 557-8  
 (Symposium on the radiation and fisheries problems. 3. Studies on the metabolism by radioisotopes). *Ni*
- Tomiyama, T., Y. Yone & A. Matsuda** (1962) X  
8-09352  
*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 522-5  
 (A comparative study on effect of chlortetracycline below 6-PPM level in keeping quality of ground flesh). *Ni En*
- Tomiyama, T.** (1962) X  
8-09353  
*Bull. Jap. Soc. sci. Fish.*,  
 (A symposium on the effectiveness and safety of the use of antibiotics keeping freshness of fish. Pt. 1. Research on the effectiveness and safety of antibiotics used in food—past and present). *Ni En*
- Tomiyana, T.** (1962) X  
8-09354  
*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 132-9  
 (A symposium on the effectiveness and safety of the use of antibiotics keeping freshness of fish. Pt. 7. Putrefaction and the development of resistant microorganisms). *Ni En*
- Tomiyana, T. & A. Matsuda** (1962) X  
8-09355  
*Bull. Jap. Soc. sci. Fish.*, 28 (6) : 593-6  
 (The effectiveness of chlortetracycline and oxytetracycline above 5-PPM level in keeping quality of ground flesh). *Ni En*
- Toyama, K. & M. Suzuki** (1961) X  
8-09356  
*Bull. Jap. Soc. sci. Fish.*, 27 (12) : 1084-7  
 (Estimation of antioxidants added to the marine products. 2. Applicability of the steam-distillation method to the estimation of BHA and BHT). *Ni En*
- Toyomizu, M., E. Saigusa & Y. Tomiyasu** (1962) X  
8-09357  
*Bull. Jap. Soc. sci. Fish.*, 28 (3) : 335-9  
 (Variation of biological potency (Maleic value) by the difference of extraction methods of fish liver oil). *Ni En*
- Study of isomerization of vitamin A during the extraction of oil from the liver of *Carcharhinus gangeticus*. Relative biological and maleic values were measured by the method of Ames *et al.*

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- X  
8-09358
- Tsuyuki, H., U. Naruse & A. Shionoya** (1961)  
*Bull. Jap. Soc. sci. Fish.*, 27 (12) : 1107-12  
 (On the yellowtail oil. 6. Acetone-soluble lipid in meats). *Ni En*

Properties of the acetone-soluble lipid contained in the ordinary meat and the red meat of *Seriola quinqueradiata* caught in winter and in spring.

- X  
8-09359
- Tsuyuki, H., U. Naruse & A. Shionoya** (1961)  
*Bull. Jap. Soc. sci. Fish.*, 27 (12) : 1113-6  
 (On the yellowtail oil. 7. Lecithin in meats). *Ni En*

Characteristics of lecithin (acetone-insoluble, ethanol-soluble lipid) contained in the ordinary and red meats of *Seriola quinqueradiata* caught in winter and in spring.

- X  
8-09360
- Tsuyuki, H., U. Naruse & A. Shionoya** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (2) : 217-21  
 (On the yellowtail oil. 8. Cephalin in meats). *Ni En*

- X  
8-09361
- Tsuyuki, H. & U. Naruse** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (6) : 585-8  
 (On the yellowtail oil. 9. Sphingolipid in meat). *Ni En*

- X  
8-09362
- Tsuyuki, H. & U. Naruse** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (6) : 589-92  
 (On the yellowtail oil. 10. Cerebrone sulfuric ester in meat). *Ni En*

- X  
8-09363
- Yone, Y.** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 92-9

(A symposium on the effectiveness and safety of the use of antibiotics keeping freshness of fish. Pt. 2. Problems involved in the use of antibiotics on fishing boats). *Ni En*

## AQUATIC STOCKS

- M  
8-09364
- Hayashi, S. & A. Tadokoro** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 30-3  
 (Catch of the Taiwan-ainoko in the anchovy fishing area around Japan).  
*Ni En*

Morphological data on *Stolephorus zollingeri* (Bleeker) and comparison with *Engraulis japonica*.

- M  
8-09365
- Hayashi, S. & A. Tadokoro** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 26-9

Occurrence of the Taiwan-ainoko, *Stolephorus zollingeri* (Bleeker), in Japan

Description; discussion of this record extending known distribution.

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**Hurley, D. E.** (1962)

M  
8-09366

*N.Z.J. Geol. Geophys.*, 5 (1) : 13-6

A second species of *Priapulus* from New Zealand waters

*Priapulus tuberculatospinosus tuberculatospinosus* Baird and *P. t. abyssorum* (Menzies) have previously been recorded from New Zealand waters. *Priapulus australis* (de Guerne), previously known only from depths of 90-390 m in South American waters, is now recorded from 29-32 fathoms in Hawke Bay, New Zealand.

**Igarashi, H. et al.** (1962)

M  
8-09367

*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 518-21

(Lipids of flounder. 1. Acetone-soluble lipids from flounder flesh, *Hippoglossoides dubius*). Ni En

Characteristics of the lipid and its fatty acid composition.

**Igarashi, T.** (1961)

M  
8-09368

*Bull. Fac. Fish. Hokkaido*, 12 (3) : 181-8

Histological and cytological changes in the ovary of a viviparous teleost, *Neoditrema ransonneti* Steindachner during gestation

General external features and histology of the ovary, histology of early and of gravid ovary, functional relation between embryo and ovary.

**Job, S. V.** (1961)

M  
8-09369

*J. zool. Soc. India*, 13 (2) : 143-7

A new record of a digenetic trematode of the genus *Platocystis* (Family: Didymozoidae)

Ill. description of *Platocystis polyastra* n.sp., parasitic on *Sphyræna obtusata*, with specific diagnosis of *Platocystis alalongae* Yamaguti, 1938 parasitic on *Thynnus alalongae*.

**Kakimoto, D.** (1962)

M  
8-09370

*Bull. Jap. Soc. sci. Fish.*, 28 (4) : 445-7

(Studies on the unknown factor in the pyloric coeca of skipjack. 5. Composition of the unknown factor). Ni En

Amino acid composition of this factor which has the power to promote the growth of *Leuconostoc citrovorum*. Co 61-06812, Ci 61-01888, Ci 61-01889, Ci 61-06811.

**Kobayashi, K.** (1962)

M  
8-09371

*Bull. Fac. Fish. Hokkaido*, 12 (4) : 253-64

Ichthyofauna of Oshoro Bay and adjacent waters

List of 75 spp. of 59 genera and 37 families, with notes on locality and frequency of occurrence.



# AQUATIC STOCKS

- M  
8-09372
- Kobayashi, K.** (1961)  
*Bull. Fac. Fish. Hokkaido*, 12 (2) : 111-20  
 (Larvae and young of the sand-launce, *Ammodytes hexapterus* Pallas from the North Pacific). Ni En

Body characteristics, vertebral count, length composition.

- M  
8-09373
- Kobayashi, K. & M. Igarashi** (1961)  
*Bull. Fac. Fish. Hokkaido*, 12 (2) : 121-7  
 (Larvae and young of *Girella punctata* Gray from Hakodate Bay in southern Hokkaido). Ni En

Ill. morphological description.

- M  
8-09374
- Kobayashi, K.** (1961)  
*Bull. Fac. Fish. Hokkaido*, 12 (1) : 1-4  
 (Young of the wolf-fish, *Anarhichas orientalis* Pallas). Ni En

Ill. morphological description of 2 specimens collected in the Okhotsk Sea.

- M  
8-09375
- Kobayashi, K.** (1961)  
*Bull. Fac. Fish. Hokkaido*, 12 (1) : 5-8  
 (Larvae and young of the quill-fish, *Ptilichthys goodei* Bean, from the Okhotsk Sea). Ni En

Ill. morphological description.

- M  
8-09376
- Kojima, S.** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 17-25  
 (On the movements of the mackerel, *Scomber japonicus* Houttuyn, tagged in the neighboring waters of Oki Islands). Ni En

Tabulation of numbers tagged and of those recovered; indications of movements; surface currents at time of tagging and comparison of tagged-fish movements with those of drift bottles.

- M  
8-09377
- Kubo, I.** (1961)  
*Bull. Jap. Soc. sci. Fish.*, 27 (12) : 1063-5  
 (Stomach volume of Japanese spiny lobster, *Panulirus japonicus*). Ni En

Measurement by gravimetric method using emery; relations between this volume and body length and weight.

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- Kubo, I.** (1962) M  
8-09378  
*Bull. Jap. Soc. sci. Fish.*, 28 (3) : 322-5  
 (On the bimodality found in the catch of Japanese spiny lobster, *Panulirus japonicus*). Ni En

Nocturnal foraging leads to strong differences in catch rate between hours of the day.

- Kuroki, T. & K. Kumanda** (1961) M  
8-09379  
*Bull. Fac. Fish. Hokkaido*, 12 (1) : 16-31  
 (The effects of underwater explosions for the purpose of killing predacious fishes). Ni En

Measurement of underwater pressure and recording of underwater sound, with record of types of injury caused related to distance of fish from site of explosion. The work was carried out as a part of an operation to clear a cove of fish fauna preparatory to developing culture (growing) of *Seriola quinqueradiata*.

- Kusuda, R.** (1962) M  
8-09380  
*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 551-2  
 (Symposium on the culture of fish in sea-water. 3. Culture of the aye, *Plecoglossus altivelis* in sea-water pond). Ni

- Holme, T.** (1964) M  
8-09381  
*Fiskeridir. Skr. Fisk.*, 5 (1) : 80 p.  
 Japansk bonito- og tunafiske (Japanese bonito and tuna fish). En

- Lane, J. P.** (1964)\* MF  
8-09382  
*Food Tech., Champaign*, 18 (7) : 156  
 Time-temperature tolerance of frozen seafoods. 1. Review of some of the recent literature on the storage life of frozen fishery products

- Petrenko, I. N. & A. A. Karasikova** (1960) M  
8-09383  
*Trud. vsesoiuz. nauch.-issled. Inst. morsk. ryb. Khoz.*, 42 : 189-94  
 The use of the characteristics of the amino acid complex of the sprat in making short-term forecasts of its catch

CA 57 (12) : 15624.

- Ianulov, K. P.** (1962) M  
8-09384  
*Dokl. Akad. Nauk SSR*, 144 : 1196-9  
 Mochekamennaiia bolezn'u morskikh okunej *Sebastes marinus* L. i *Sebastes mentella* Travin (Urinary lithiasis in *Sebastes marinus* L. and *Sebastes mentella* Travin)

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M  
8-09385

**Ivanov, A. S.** (1962)  
*Ryb. Khoz.*, 38 (4) : 82-3  
 (Truptase activity of the anchovy-like sprat at low temperature). *Ru*

CA 57 (10) : 13027.

M  
8-09386

**Schwartz, A. et al.** (1961)  
*Stud. Univ. Babes-Bolyai*, 2 (2) : 282-4

Adrenocorticotropin content of the hypophysis of some fish of the Black Sea

CA 57 (10) : 13027. The quantity of adrenocorticotropin in the hypophysis of fish varied according to species. The highest quantity was found in *Gobius melanostomus* and the smallest in *Trachurus trachurus*.

M  
8-09387

**Precup, O.** (1960)  
*Stud. Univ. Babes-Bolyai*, 2 (2) : 225-30

Excretions of fish. 5. Excretion of *Gobius melanostomus* of the Black Sea

CA 57 (10) : 13034. CR 8-09388.

M  
8-09388

**Precup, O.** (1960)  
*Stud. Univ. Babes-Bolyai*, 2 (2) : 253-62

Excretions of fish. 6. Nitrogen excretion and resistance to autointoxication by nitrogen products of fish of the Black Sea

Co 8-09387. CA 57 (10) : 13034.

M  
8-09389

**Malvin, R. L. & I. B. Fritz** (1962)  
*J. cell. comp. Physiol.*, 59 : 111-5

Renal transport of urea and some carbohydrates in *Lophius piscatorius*

CA 57 (7) : 9022.

MF  
8-09390

**Pora, E. A., O. I. Precup & I. Oros** (1961)  
*Stud. Univ. Babes-Bolyai*, 2 (2) : 235-56

Penetration and elimination of radio-phosphorus in some marine and freshwater fish

CA 57 (9) : 11682.

M  
8-09391

**Mito, S.** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 499-503

(On the egg development and early larvae of a trachinoid fish, *Champsodon snyderi* Franz.). *Ni En*

Ill. description.

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**Nakahara, K.** (1962)

M  
8-09392

*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 484-8

(A note on the larvae of *Antigonia capros* Lowe and *Erythrocles schlegeli* (Richardson) collected off the southern coast of Kyushu). Ni En

Ill. description, and list of differences between *A. capros* larvae and those of *A. rubescens*.

**Oka, M.** (1962)

M  
8-09393

*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 477-83

(Studies on the estimation of the stock capacity of gyosho). Ni En

The gyosho is a kind of artificial reef intended to increase the stock of fish at a particular site. Estimation of capacity involves reference to relation between yield and fishing effort.

**Shigeno, K.** (1962)

M  
8-09394

*Bull. Jap. Soc. sci. Fish.*, 28 (5) : 548-9

(Symposium on the culture of fish in sea-water. 1. Problems on the collection of fry and seedling from natural bodies of water). Ni

**Barlow, G. W.** (1961)

M  
8-09395

*Biol. Bull., Woods Hole*, 121 (2) : 209-29

Intra- and interspecific differences in rate of oxygen consumption in gobiid fishes of the genus *Gillichthys*

Reports results of a study on vergence between widely separated populations of *Gillichthys mirabilis* Cooper; comprises results of physiological and morphological findings.

**Carton, Y.** (1963)

M  
8-09396

*C.R. Acad. Sci., Paris*, 256 (5) : 1148-50

Étude de la spécificité parasitaire chez *Lichomolgus actiniae* D.V. (Copépode Cyclopoïde) (Study on the parasitic specificity in *Lichomolgus actiniae* D.V. (Copepoda Cyclopidae) )

Contamination experiments on *Anemonia sulcata* and *Actinia equina* from Rosecoff and Banyuls showing marked physiological differences.

**Gunter, G., L. L. Sulya & B. E. Box** (1961)

M  
8-09397

*Biol. Bull., Woods Hole*, 121 (2) : 302-6

Some evolutionary patterns in fishes' blood

Reports results of a study made, by electrophoretic techniques, of the plasma proteins of 26 species of elasmobranch and teleostome fishes from the northern gulf of Mexico. A general increase was found in the amount of plasma proteins from lower to more specialized fishes. There was a gradual increase in the number of globulin fractions of the plasma, from lower to higher fishes, among the orders of fishes, which did not always hold true at species levels.



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- Shiokawa, T. (1962)** M  
8-09398  
*Bull. Jap. Soc. sci. Fish.*, 28 (6) : 574-8  
 (Studies on the small coastal gill-net fisheries and their resources. 1. On the flying-fish drift gill-net fishery). *Ni En*

Examination of catch data, catch per unit effort, size examination of catch and seasonal changes of gonad index, to assess abundance of the stocks, selectivity of the method, and dependence of catch and fishing season on intensity and timing of spawning migration.

- Shiokawa, T. (1962)** M  
8-09399  
*Bull. Jap. Soc. sci. Fish.*, 28 (9) : 884-90  
 (Studies on the small coastal gill-net fisheries and their resources. 4. Fish population caught by the bottom gill-net). *Ni En*

Length composition of catch of 6 spp.; relation of average catch per net with its coefficient of variation for various spp.; seasonal variation of catching rate related to spawning and feeding. Co 8-09264.

- Taguchi, K. (1961)** M  
8-09400  
*Bull. Jap. Soc. sci. Fish.*, 27 (11) : 963-71  
 (A trial to estimate the instantaneous rate of natural mortality of adult salmon (*Oncorhynchus* sp.) and the consideration of rationality of offshore fishing. 1. For chum salmon (*Oncorhynchus keta*) 1961). *Ni En*

Attempt to estimate the difference between the increase in weight by growth and the decrease in weight by natural mortality during migration from off-shore to the coast; work based on tagging results which permit estimate of mortality rates and of recruitment strength.

- Tanoue, T. (1962)** M  
8-09401  
*Bull. Jap. Soc. sci. Fish.*, 28 (9) : 847-50  
 (Tentative studies on the live-bait. 1. On the swimming pattern and live-bait-efficacy in hooked horse-mackerel, *Trachurus japonicus*). *Ni En*

Horse mackerel were hooked at different parts of the body and allowed to swim on the end of the line; their swimming behaviour and their mortality over a six-hour period (at the end of which all had died) were recorded.

- Tanoue, T. (1961)** M  
8-09402  
*Mem. Fac. Fish. Kagoshima*, 10 : 90-5  
 (On the relation between body-temperature of mackerel gomasaba and its fishing depth). *Ni En*

Measurements of body temperature immediately after being caught by long-line and comparison with body temperature after being held in water tank on board, to assess value of body temperature at capture as indicator of depth at which caught.

**Tanoue, T.** (1961)M  
8-09403*Bull. Jap. Soc. sci. Fish.*, 27 (12) : 1041-6

(Studies on the relationships between the drifting distribution of mackerel larvae, *Pneumatophorus tapeinocephalus* Bleeker, and the environmental factors. 2. On the larvae and the sea conditions in the surface and the middle-layers around the Osumi Islands). *Ni En*

Size of larvae, rates of collection at various depths and temperatures.  
Co 61-01909.

**Yasuda, H. & S. Ito** (1962)M  
8-09404*Bull. Jap. Soc. sci. Fish.*, 28 (6) : 570-3

(Granographical life record curve method for identifying each stock of pelagic fishes. 1. Identification of sardine stocks in the Japan Sea.) *Ni En*

Plot, against back-calculated body-length from scale reading, of percentage of fish (in each sample) having a ring within each calculated length interval and designation of 'scale-types' from the result.

**Tortonese, E.** (1959)M  
8-09405*Ann. Mus. Stor. nat. Genova*, 71 : 57-82

Revisione dei Centrolophidae (Pisces, Perciformes) del mar Ligure (Revision of the Centrolophidae (Pisces, Perciformes) from the Ligurian Sea). *It En*

Description of *Cubiceps gracilis*, *Centrolophus niger*, *Schedophilus medusophagus* and *S. ovalis*, the four species known from the Ligurian Sea.

**Tortonese, E.** (1959)M  
8-09406*Ann. Mus. Stor. nat. Genova*, 71 : 226-32

Un nuove pesce mediterraneo di profondità, *EUTELICHTHYS leptochirus* n. gen. and n. sp. (fam. Eutelichthyidae nov.) (A new Mediterranean deep-sea fish, *EUTELICHTHYS leptochirus* n. gen. n. sp., fam. Eutelichthyidae nov.). *It En*

Description of this new species from two small specimens taken at 500 m. depth off Algeria.

**Tortonese, E.** (1959)M  
8-09407*Ann. Mus. Stor. nat. Genova*, 71 : 233-47

Contributo allo studio degli Ophichthidae del Mediterraneo (Pisces: Anguilliformes) (Contribution to the study of the Ophichthidae of the Mediterranean Sea (Pisces: Anguilliformes)). *It En*

Description of the six Mediterranean species, one of which, *Pisodonophis semicinctus*, is hitherto known only from the coasts of Algeria.

**Carnaud, J.** (1962) M  
8-09408  
*Bull. Inst. océanogr. Monaco*, (1248) : 83

Monographie de l'*Apogon* méditerranéen, *Apogon imberbis* (Linné) 1758  
 (Monography on the red *Apogon* from the Mediterranean *Apogon imberbis*  
 (Linné) 1758)

Chapters on systematics, external morphology, habitat and geographical  
 distribution, growth, sex-ratio, nuptial behaviour, internal fertilization,  
 spawning, breeding, embryonic development, larvae.

**Mironova, N. V.** (U.K. MAFF Transl.) (1962) M  
8-09409  
 Lowestoft, Fish. Lab., mimeo, 19 p.

The distribution of cod

*En* 60-5784. Assessment of distribution in waters of Murman coast  
 from 1953 to 1955 based on trawling returns for coastal fishing vessels and for  
 trawlers of Murmansk fishing fleet operating in the coastal fishery squares.  
 Data on absence of cod in any particular area obtained from returns for a  
 small number of sweeps by expedition ship 'Diana'. Information on tem-  
 perature conditions in coastal waters is taken from data provided by the  
 Hydrological Laboratory and from an article by O. F. Kondratsova.

**Maldacea, L. & E. Rocca** (1959) M  
8-09410  
*R.C. Ist. lombardo, (B)*, 93 (1) : 50-4

Ricerche sull'actinà della muscolatura della torpedine (Researches on the  
 actin from the muscles of the electric-ray). *It En*

G-actin was extracted from the muscles of the tail of *Torpedo ocellata* and  
*T. marmorata*.

**Matta, F.** (1962) M  
8-09411  
*Boll. Pesca Piscic. Idrobiol.*, 16 (1) : 95-143

Rilevamenti ittologici e tecnici nell'Atlantico nord-occidentale (Ichthyo-  
 logical and technical observations in the north-west Atlantic ocean). *It*  
*Fr En*

Observations on gadoid fishes and *Sebastes* sp. and description of the  
 fishing grounds and the working systems on board of the trawler 'Genepesca  
 I'.

**Torchio, M.** (1962) M  
8-09412  
*Boll. Pesca Piscic. Idrobiol.*, 16 (1) : 144-51

Osservazioni intorno alla probabile stenotermia del *Nemichthys scolopaceus*  
 Rich. in Mediterraneo (Pisces Anguilliformes) (Observation on the probable  
 stenotermity of *Nemichthys scolopaceus* Rich. (Pisces Anguilliformes) in the  
 Mediterranean Sea)

Concludes that this species should be considered a stenothermic species  
 performing real bathymetric migrations whose limit is a thermic layer ranging  
 from 13° to 15°C.

- Torchio, M.** (1962) M  
8-09413  
*Boll. Pesca Piscic. Idrobiol.*, 16 (1) : 152-5  
 I Soleidae del mar Ligure (Pisces Pleuronectiformes) (The Soleidae (Pisces Pleuronectiformes) of the Ligurian Sea). *It Fr En*

Eight species are listed and provisional notices are given on the frequency and bathymetrical distribution in the Ligurian Sea.

- Chittleborough, R. G.** (1959) M  
8-09414  
*Norsk Hvalfangst-tid.*, 48 (2) : 47-55  
 Australian marking of humpback whales. *No*

Summarizes up to 1958 the results of marking *Megaptera nodosa* off the Australian coast.

- Ruud, J. T. & P. Øynes** (1959) M  
8-09415  
*Norsk Hvalfangst-tid.*, 48 (2) : 56-61  
 Whale marking carried out by Norwegian catchers in the Antarctic, seasons 1956/57 and 1957/58. *No*

- Chittleborough, R. G.** (1959) M  
8-09416  
*Norsk Hvalfangst-tid.*, 48 (2) : 62-6  
*Balaenoptera brydei* Olsen on the west coast of Australia. *No*

- Percier, A.** (1959) M  
8-09417  
*Rev. Trav. Inst. Pêches marit.*, 23 (2) : 161-76  
 Les activités du bateau-pilote-de-pêche 'Donibane' (The activities of the scouting boat 'Donibane')

Results of scouting observations of sardines, anchovies and bluefin tunas.

- Angelin, J. & C. Nedelec** (1959) M  
8-09418  
*Rev. Trav. Inst. Pêches marit.*, 23 (2) : 177-202  
 Marquage de harengs en Mer du Nord et en Manche orientale (Campagne du 'Président-Théodore-Tissier', novembre 1957 (Herring tagging in the North Sea and oriental English Channel—Cruise of the 'Président-Théodore-Tissier', November 1957)

Describes tags and tagging operation and gives recoveries.

- Rossignol, M.** (1959) M  
8-09419  
*Rev. Trav. Inst. Pêches marit.*, 23 (2) : 211-24  
 Contribution à l'étude biologique des sardinelles. Étude de la variabilité d'un caractère méristique: le nombre de branchiospines (Contribution to the biological study of *Sardinella*. Study of the variability of a meristic character: the number of gill-rakers)

Study of the variability of gill rakers in *Sardinella aurita*, *S. eba* of West Africa and comparisons with *S. cameronensis* and *S. aurita* var. *mediterranea*.



# AQUATIC STOCKS

- Craig, W. L. & R. H. Haneday** (1962) M  
8-09420  
*Calif. Fish Game*, 48 (3) : 179-98  
 The 1960 pre-season albacore survey in the northeastern Pacific Ocean

Describes a survey, 23 May to 18 Jun. 1960 of an area bounded roughly by lat 30° to 38° N. and long. 134° W and the Channel Islands off California prior to the regular fishing season for *Thunnus germon* including exploratory fishing and collection of oceanographical data.

- Smith, A. C.** (1962) M  
8-09421  
*Calif. Fish Game*, 48 (3) : 199-201

The electrophoretic characteristics of albacore, bluefin tuna, and kelp bass eye lens proteins

First known report of such studies on fish eye lens proteins. Characteristics of *Thunnus germon*, *T. saliens* and *Paralabrax clathratus*.

- Carlisle, J. C., Jr.** (1962) M  
8-09422  
*Calif. Fish Game*, 48 (3) : 209

An unusual catch of a large number of Pacific round herring off Long Beach, California

Fourth record of *Etrumeus accuminatus* from California waters, 9 Nov. 1961, off Long Beach.

- Frey, H. W.** (1962) M  
8-09423  
*Calif. Fish Game*, 48 (3) : 210-1

A range extension for the Mexican scad to Monterey Bay, California

Describes capture of *Decapterus pinnulatus* in Jul. 1961 increasing known northern range.

- Berner, M.** (1961) M  
8-09424  
*Z. Fisch.*, 10 (7) : 481-602

Untersuchungen über den Dorschbestand (*Gadus morhua* L.) der Bornholm- und Arkonasee in den Jahren 1953-1955 (Investigations on the amount of cod, *Gadus morhua* L., in the sea off Bornholm and Arkona in the years 1953-1955. Yearly and maturity cycle). En Ru

Points out the manifold relationships between spawning biology and the seasonal course of practical fishery; demonstrates that fishing grounds, yield, size and age composition of fish are conditioned throughout the year by the spawning cycle. Tables, bibliography.

- Leccia, F. M.** (1961) M  
8-09425  
*Bol. Inst. oceanogr. Univ. Oriente*, 1 (2) : 396-473

Osteologia comparada en ocho especies de Pomadasydæ (Pisces-Perciformes) del golfo de Cariaco, Venezuela, y áreas adyacentes (Comparative osteology of eight species of Pomadasydæ (Pisces Perciformes) from the gulf of Cariaco, Venezuela, and adjacent areas). En

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**Radovich, J.** (1962)

M  
8-09426

*Calif. Fish Game*, 48 (2) : 123-40

Effects of sardine spawning stock size and environment on year-class production

Develops a population model for *Sardinops caerulea* which is also fitted by other species, and discusses possibility of the collapse of a genetically distinct subpopulation of this *Sardinops*.

**Veillet, A.** (1963)

M  
8-09427

*C.R. Acad. Sci., Paris*, 256 (7) : 1609-10

Métamorphose de la cypris ♀ du rhizocéphale *Drepanorchis neglecta* Fraysse (Metamorphose of the cypris ♀ of the rhizocephale *Drepanorchis neglecta* Fraysse)

Preliminary note reporting observations on the larval development of individuals parasites of *Macropodia rostrata* from Roscoff area.

**Martin, F. I.** (1960)\*

M  
8-09428

Philadelphia, Chilton Co., Book Division, 201 p.

Sea bears; the story of the fur seal

**McAllister, D. E.** (1960)\*

M  
8-09429

*Nat. Hist. Pap.*, (5) : 21 p.

Keys to the marine fishes of arctic Canada

**Rubinfoff, I. & E. Shaw** (1960)\*

M  
8-09430

*Amer. Mus. Novit.*, (1999) : 13 p.

Hybridization in two sympatric species of atherinid fishes, *Menidia menidia* (Linnaeus) and *Menidia beryllina* (Cope)

**USFWS. Bureau of Commercial Fisheries** (1960)\*

M  
8-09431

*Rep. biol. Lab. Woods Hole*, (60-1)

Summary of tagging operations Jul. 1959-Jun. 1960

**Webb, R. G.** (1960)\*

M  
8-09432

*Breviora*, (129) : 8 p.

Type and type locality of the Gulf Coast spiny softshell turtle, *Trionyx spinifer asper* (Agassiz)

**Clemens, W. A. & G. V. Wilby** (1961)\*

M  
8-09433

*Bull. Fish. Res. Bd Can.*, (68) : 443 p.

Fishes of the Pacific coast of Canada

**U.S. Bureau of Commercial Fisheries** (1961)\*

M  
8-09434

Seattle, Marine Mammal Biological Laboratory

Pelagic fur seal investigations

# AQUATIC STOCKS

**U.S. Bureau of Commercial Fisheries. Pacific Region (1961)\*** M  
8-09435  
Seattle, 10 p.

Fur seal investigations. Pelagic investigations. Plans of operations—May to October 1962 and Pribilof Islands fur seal investigations

**Marvin, K. T. & L. M. Lansford (1962)** M  
8-09436  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 143-6

Phosphorus content of some fishes and shrimp in the Gulf of Mexico

The total phosphorus composition was determined for ten species of fish and *Penaeus setiferus* found in the coastal and bay waters of Galveston, Texas. The results of the analyses, which were based on the entire animal, were compared with the few similar analyses that have been made on other marine species.

**Breuer, J. P. (1962)** M  
8-09437  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 153-83

An ecological survey of the lower Laguna Madre of Texas, 1953-1959

Hydrographic data and annotated comments on the distribution and habits of species are presented. Some ecological effects of man-made changes and movements of year classes of game fishes are described.

**Simmons, E. G. & J. P. Breuer (1962)** M  
8-09438  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 184-211

A study of redfish, *Sciaenops ocellata* Linnaeus and black drum, *Pogonias cromis* Linnaeus

Information on distribution, life history, parasites, sport and commercial fishery of the spp. in the Gulf of Mexico from 1949 to 1959.

**Thompson, J. R. & S. Pringer (1961)\*** M  
8-09439  
*Circ. U.S. Fish Wildl. Serv.*, (119) : 19 p.  
Sharks, skates, rays, and chimaeras

**Wheeler, J. F. G. (1961)** M  
8-09440  
*Fish. Publ. Lond.*, (15) : 199 p.  
The genus *Lethrinus* in the western Indian Ocean

A clear up of the taxonomy of *Lethrinus* with special reference to the fishes in their *post mortem* colours and markings of the local markets on and off the East African coast.

**Brown, S. G. (1962)** M  
8-09441  
*Norsk Hvalfangst-tid.*, 51 (11) : 429-34

Whale marks recovered during Antarctic seasons 1960/61, 1961/62, and in South Africa 1962. No

Oregon. State Game Commission. Information-Education  
Division (1961)\*

M  
8-09442

Ore. St. Game Comm. Bull., (14) : 4 p.  
Rock, surf and bay fishes of Oregon

Cogswell, S. L. (1959)\*

M  
8-09443

Woods Hole, Fisheries Biological Laboratory, 15 p.  
Summary of tagging operations, January 1958 through June 1959

Bone, Q. (1963)

M  
8-09444

J. Mar. biol. Ass. U.K., 43 (1) : 31-47

Some observations upon the peripheral nervous system of the hagfish,  
*Myxine glutinosa* L.

Observations are described upon the innervation of striated muscles, the  
innervation of the slime glands, and the subcutaneous innervation.

Denton, E. J. & T. I. Shaw (1963)

M  
8-09445

J. Mar. biol. Ass. U.K., 43 (1) : 65-74

The visual pigments of some deep-sea elasmobranchs

A study of the retinae of three species of deep-sea shark, *Centrophorus squamosus*, *Centroscymnus coelolepis* and *Deania calcea*. The retina of the hake (*Merluccius merluccius*) was studied for comparison. Some observations on the retinae of the moray eel (*Muraena helena*) and the Atlantic salmon (*Salmo salar*) are also described.

Bagenal, T. B. (1963)

M  
8-09446

J. Mar. biol. Ass. U.K., 43 (1) : 177-9

The fecundity of plaice from the bay of Biscay

*Pleuronectes platessa* L.

Bagenal, T. B. (1963)

M  
8-09447

J. Mar. biol. Ass. U.K., 43 (1) : 221-3

The fecundity of Icelandic plaice

One of a series of papers on the fecundity of *Pleuronectes platessa* L. over  
a wide area of its geographical distribution.

Hashimoto, K. & F. Matsuura (1962)

MF  
8-09448

Bull. Jap. Soc. sci. Fish., 28 (9) : 914-9

Comparative studies on two hemoglobins of salmon. 4. N-terminal amino  
acid

Identification of N-terminal residues and determination of their number.



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MF  
8-09449

**Inaba, D. & R. Uehara** (1962)  
*Bull. Jap. Soc. sci. Fish.*, 28 (7) : 679-85  
 (On the types and roles played by the resting pool of eel-pond). Ni En

Depth and surface area of ponds; types of water circulation, temperature and O<sub>2</sub>.

MF  
8-09450

**Kubo, T.** (1961)  
*Bull. Fac. Fish. Hokkaido*, 12 (3) : 189-95

(Notes on the blood of masu salmon (*Onchorhynchus masou*) during up-stream migration for spawning, with special reference to the osmoconcentration). Ni En

Changes in freezing point, chloride content, density and water content.

MF  
8-09451

**Tiwari, R. D. & K. C. Srivastava** (1962)  
*Proc. nat. Acad. Sci., India, (A)* 32, Pt 2 : 111-8

Component acid from the visceral fat of the fish *Labeo rohita* with different stages of growth

CA 57 (11) : 14301.

MF  
8-09452

**Fingerman, M. & T. Aoto** (1962)  
*Gen. Compt. Endocrin.*, Suppl. 1 : 81-93

Hormonal regulation of pigmentary effectors in crustaceans

CA 57 (12) : 15626.

MF  
8-09453

**Jonas, R. E. E., H. S. Sehdev & N. Tomlinson** (1962)  
*J. Fish. Res. Bd Can.*, 19 : 619-24

Blood pH and mortality in rainbow trout (*Salmo gairdnerii*) and sockeye salmon (*Oncorhynchus nerka*)

CA 57 (10) : 13029.

MF  
8-09454

**Steffens, W.** (1962)  
*Naturwissenschaften*, 49 : 109-10

(The determination of hemoglobin in fish). De

CA 57 (2) : 2687. Mammalian red cells contain nuclei only in the embryonic form whereas those of fish contain them at all times.

**Nose, Y. (1961)**MF  
8-09455*Bull. Jap. Soc. sci. Fish.*, 27 (10) : 881-92(On the Petersen-type estimate of fish population under the existence of recruitment). *Ni* En

Mathematical examination (with bead-drawing trials) of the effect of recruitment (1. at constant rate relative to population, 2. at constant amount) on estimates of population size. Proposals for removal of bias in the estimates.

**Nose, Y. (1962)**MF  
8-09456*Bull. Jap. Soc. sci. Fish.*, 28 (7) : 686-94(On the tagged ratio methods to remove the bias of estimate caused by type C systematic errors in the Petersen-type tagging experiments). *Ni*

Mathematical derivation of method to remove the bias and examples of calculations.

**Șerpoianu, Gh., C. Mărgineanu & V. Chirilă (1961)**MF  
8-09457*Bul. Inst. Cerc. pisc.*, 20 (4) : 12-26

Consecințele condițiilor meteorologice, hidrologice și hidrobiologice ale anilor 1960-1961 asupra pescuitului marin românesc din cursul anului 1961 (Effects of meteorological, hydrological and hydrobiological conditions in the years 1960-1961 on the Roumanian marine fisheries in 1961). *Ro Ru Fr*

Discusses the interrelations observed in the Black Sea in relation to migration and availability of fish.

**Suzuki, T. & M. Migita (1962)**MF  
8-09458*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 61-72(Post mortem change of fish myosins. 1. Some physicochemical changes with special reference to species and lethal conditions of fish). *Ni* En

Comparison, between fish killed instantaneously and fish killed after stress, of extractability, salting-out curves and viscometric behaviour.

**Tomiya, T., K. Kobayashi & K. Kawabe (1962)**MF  
8-09459*Bull. Jap. Soc. sci. Fish.*, 28 (4) : 417-21(The toxic effect of pentachlorophenate, a herbicide, on fishery organisms in coastal waters. 3. The effect on *Venerupis philippinarum*). *Ni* En

Study of the toxic effect of PCP (which contaminates shallow coastal waters in drain-off from paddy-fields) by observing the rate of  $^{32}\text{P}$  uptake and survival time on exposure to test solutions, renewed each day. *Co* 8-09206.

**Tomiyama, T. et al. (1962)** MF  
8-09460  
*Bull. Jap. Soc. sci. Fish.*, 28 (4) : 422-5

(The toxic effect of pentachlorophenolate, a herbicide, on fishery organisms in coastal waters. 4. The effect on *Venerupis philippinarum* of PCP which was constantly supplied or absorbed on estuary mud). *Ni En*

Co 8-09459.

**Tomiyana, T. & K. Kawabe (1962)** MF  
8-09461  
*Bull. Jap. Soc. sci. Fish.*, 28 (3) : 379-82

(The toxic effect of pentachlorophenolate, a herbicide, on fishery organisms in coastal waters. 1. The effect on certain fishes and shrimps). *Ni En*

Lethal concentrations for various organisms exposed to test solutions renewed each day; also level at which PCP could be detected by *Nibea albiglora*.

**Yamamura, Y. (1962)** MF  
8-09462  
*Bull. Jap. Soc. sci. Fish.*, 28 (1) : 39-44

(Studies on the mechanism of consumption and accumulation of vitamin A in fish. Pt. 2). *Ni En*

Relates vitamin content ( $A$ ) to body length in the formula

$$A = kl \sim {}^3[\ln(1/1-2) - \lambda - (\lambda^2/2) - (\lambda^3/3)]$$

in which  $\lambda = 1/l \sim$  and  $k$  is a constant of which values are given for several kinds of fish;  $k$  is shown independent of ground, season and depth for a particular species. Co 61-00056.

**Dulzetto, F. (1962)** MF  
8-09463  
*Atti Soc. Pelor.*, 8 (1/2) : 1-46

Le attuali conoscenze sulle acque salmastre della Sicilia e sulla loro fauna (Present knowledge of the Sicilian brackish waters and of their fauna). *It*

Describes the new species and varieties of *Engraulis* in the brackish lakes, and other fishes.

**Chadwick, H. K. (1962)** MF  
8-09464  
*Calif. Fish Game*, 48 (3) : 153-77

Catch records from the striped bass sportfishery in California

Catch records from a party boat fishery and postal card surveys are examined to determine the status of California's *Roccus saxatilis* population during the period 1949-1959. Supplements an earlier paper covering the party boat fishery for the period 1938-1948, and several papers reporting postal card survey results.

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- Lillelund, K. & W. Seemann** (1961) MF  
*Z. Fisch.*, 10 (7) : 603-58 8-09465  
 Der Sehlendorfer Binnensee (1-6). Limnologische und fischereibiologische Untersuchung eines Strandgewässers an der deutschen Ostseeküste. 6. Die Fischerei im Sehlendorfer Binnensee (The Sehlendorfer inland lake. 1-6. Limnological and biological investigations of a brackish water lake on the Baltic coast. 6. Fisheries in the Sehlendorfer inland lake). En Ru
- Co 8-06114. This typical seashore lake represents an excellent feeding lake for many edible species of fishes. Data given for: *Pleuronectes flesus*, *Anguilla vulgaris*, *Perca fluviatilis*, *Abramis brama*, *Idus melanotus*, *Leuciscus rutilus*, *Salmo salar*, *Salmo trutta* and *Gobius*. Tables, bibliography.
- Wolter, R.** (1961) MF  
*Z. Fisch.*, 10 (7) : 763-9 8-09466  
 Die *Vibrio-anguillarum*-Seuche im Strelasund und Greifswalder Bodden (The *vibrio-anguillarum* disease in the Strelasund and Greifswald Bodden). En Ru
- Slinn, D. J.** (1963) MF  
*Nature, Lond.*, 197 (4864) : 306 8-09467  
 Occurrence of *Discocotyle sagittata* on sea trout
- MacKinnon, D., L. Edgeworth & R. E. McLaren** (1961) MF  
*Canad. Fish Cult.*, (30) : 3-14 8-09468  
 An assessment of Jones Creek spawning channel, 1954-1961
- A description of a spawning channel for *Oncorhynchus* along with an assessment of its operation, maintenance and results during the seven years following construction in 1954.
- Todd, J. S. & K. J. Jackson** (1961) MF  
*Canad. Fish. Cult.*, (30) : 15-38 8-09469  
 The effects on salmon of a program of forest insect control with DDT on northern Moreby Island
- Describes results of experiments prior to the main spray program and the program itself. Also describes effects of application of a fuel oil formulation of *Bacillus thuringiensis*.
- Dalziel, J. A. & K. G. Shillington** (1961) MF  
*Canad. Fish. Cult.*, (30) : 57-60 8-09470  
 Development of a fast-growing strain of Atlantic salmon (*Salmo salar*)
- Describes development by selective breeding from late run Miramichi River stock.



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- Forrester, C. R.** (1961) MF 8-09471  
*Canad. Fish. Cult.*, (30) : 61-2  
 A note on the practical use of a salmon repellent

Describes the use of bear paws dipped in water to repel *Oncorhynchus gorbusha*.

- Hamer, B. W.** (1961) MF 8-09472  
*Canad. Fish. Cult.*, (30) : 63-4  
 Design of fishways and other fish facilities  
 Re 62-01526.

- Jubb, R. A.** (1962) MF 8-09473  
*Piscator*, 16 (54) : 20-1  
 Freshwater eels, *Anguilla* spp. in Madagascar

Discusses presence of *Anguilla marmorata*, *A. bicolor bicolor* and *A. mossambica* and eel fisheries.

- Markus, H. C.** (1962) MF 8-09474  
*Progr. Fish-Cult.*, 24 (3) : 127-30  
 Hatchery-reared Atlantic salmon smolts in ten months

Describes use of heated water to grow *Salmo salar* quickly and economically.

- Novothy, A. J. & G. F. Esterberg** (1962) MF 8-09475  
*Progr. Fish-Cult.*, 24 (3) : 139-41  
 A 132-kilocycle sonic fish tag

Describes an improved sonic fish tag 0.8 x 1.8 inches in size and weighing 7 grams in water which can be tracked by sonar and which has been developed for Pacific salmon studies.

- Hoffman, G. L.** (1962) MF 8-09476  
*Progr. Fish-Cult.*, 24 (3) : 143-4  
 Parasitology of fishes

Re 60-4187.

- Darnell, R. M.** (1962) MF 8-09477  
*Publ. Inst. Mar. Sci. Univ. Tex.*, 8 : 299-365  
 Fishes of the Río Tamesí and related coastal lagoons in east-central Mexico

For each species information is given, if available, regarding the following: nomenclature, distribution, salinity relations, general ecology, food habits, and reproduction.

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MF

**Kairov, E. A. & Z. I. Chudova** (1961)

8-09478

*Trud. latviisk. Otd. vsesoius. nauch.-issled. Inst. morsk. ryb. Khoz.*, 3 : 479-93

Propusk migriruiushchikh proizvoditelei lososia i syrti cherez rybodkhod Kegumskoi GES (The passage of migrating Atlantic salmon and vimba spawners through the fishway of the Kegum hydro-electric station)

Intensity of passage of fish upstream depends on actual discharge of water. Temperature also affected movement, as did time of day.

MF

**Kairov, E. A. & Z. I. Chudova** (1962)

8-09479

*Transl. Ser. Fish. Res. Bd Can.*, (399) : 1 p.

The passage of migrating Atlantic salmon and vimba spawners through the fishway of Kegum hydro-electric station)

En 8-09478.

MF

**Malikova, E. M., S. O. Apine & R. E. Shaldaeva** (1961)

8-09480

*Trud. latviisk. Otd. vsesoius. nauch.-issled. Inst. morsk. ryb. Khoz.*, 3 : 445-52

Ispolzovanie vitaminov v kachestve profilakticheskikh i lechebnykh sredstv pri zabolevaniakh molodi lososia na rybovodnykh savodakh (The use of vitamins as a prophylactic and medicinal measure for diseases of young salmon in hatcheries)

Treatment consists of feeding vitamin enriched foods to juvenile salmon to prevent infections with Ichthiophthiriasis and Trichodiniasis.

MF

**Malikova, E. M., S. O. Apine & R. E. Shaldaeva** (1962)

8-09481

*Transl. Ser. Fish. Res. Bd Can.*, (398) : 1 p.

The use of vitamins as a prophylactic and medicinal measure for diseases of young salmon in hatcheries

En 8-09480.

MF

**Malikova, E. M. & N. I. Kotova** (1961)

8-09482

*Trud. latviisk. Otd. vsesoius. nauch.-issled. Inst. morsk. ryb. Khoz.*, 3 : 431-43

Znachenie antibiotikov pri iskusstvennom vyrashchivanii molodi lososia (The value of antibiotics in artificial rearing of young salmon)

To intensify the growth of the salmon and to get the best results in size of the species, it is necessary to add to the food a complex of antibiotic food which contains even parts of penicillin, biomyein and furasolidon.

MF

**Malikova, E. M. & N. I. Kotova** (1962)

8-09483

*Transl. Ser. Fish. Res. Bd Can.*, (397) : 1 p.

The value of antibiotics in artificial rearing of young salmon

En 8-09482.

# AQUATIC STOCKS

**Pinsky, F. Ya. (1961)**

MF

8-09484

*Trud. latviisk. Otd. vsesoius. nauch-issled. Inst. morsk. ryb. Khoz.*, 3 : 495-503

O sutochnom ritme pitaniia segoletok lososia (*Salmo salar* L.) (The daily rhythm of feeding among fingerling salmon)

Salmon fingerlings feed more heavily in the morning hours (4-8 a.m.) than in the evening (4-8 p.m.). A difference was also found in type of food utilized in the morning and evening feeding periods.

MF

8-09485

**Pinsky, F. Ya. (1962)**

*Transl. Ser. Fish. Res. Bd Can.*, (400) : 1 p.

The daily rhythm of feeding among fingerling salmon (*Salmo salar* L.)

En 8-09484.

MF

8-09486

**Creutzberg, F. (1961)\***

*Neth. J. Mar. Res.*, 1 (3) : 257-338

On the orientation of migrating elvers (*Anguilla vulgaris* Turt.) in a tidal area

MF

8-09487

**Lindroth, A. (1961)\***

ICES, C.M. (6) : 31.

Salmon and porpoise in the Baltic; preliminary communication

MF

8-09488

**Freeman, R. F. H. (1963)**

*J. Mar. biol. Ass. U.K.*, 43 (1) : 113-23

Experimental infection of two species of wrasse with the digenean *Proctoeces subtenuis*

Two spp. of wrasse, *Ctenolabrus rupestris* (L.) and *Crenilabrus melops* (L.) were experimentally infected with the digenean *Proctoeces subtenuis* (Linton) collected from *Scrobicularia plana* (da Costa); the experimental results are discussed.

F

8-09489

**Honma, Y. (1961)**

*Bull. Jap. Soc. sci. Fish.*, 27 (10) : 873-80

Studies on the endocrine glands of the salmonoid fish ayu, *Plecoglossus altivelis* Temminck et Schlegel. 4. The fate of the unspawned eggs and the new crops of oocytes in the spent ovary

Cyto-histological examination of the spent ovaries of otu-nen ayu which have remained in the rivers after spawning.

F

8-09490

**Igarashi, K. (1962)**

*Bull. Jap. Soc. sci. Fish.*, 28 (4) : 393-8

(Observation on the development of the scutes in ten-spined stickleback, *Pungitius sinensis* (Guichenot). Ni En

Ill. morphological description.

- Ishida, R.** (1961) F  
8-09491  
*Bull. Jap. Soc. sci. Fish.*, 27 (12) : 1052-7  
 (On the spawning of the ayu, *Plecoglossus altivelis* T. & S. 2. Relationships between the size of spawners and the size of gravels of the spawning bed).  
*Ni En*

Ci 8-09492.

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An investigation into the effects of warmed water from Marchwood power station into Southampton water

WPA 36 (2) 347. Studies carried out since 1950 by the Southampton Harbour Board, the Central Electric Generating Board, and the University of Southampton to investigate local marine conditions, particularly temperature and biology, during the construction, commissioning, and subsequent operation of the power station. The methods used in the investigation and the results so far obtained are discussed.

**Ide, F. P.** (1961) MF  
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*Proc. ent. Soc. Ont.*, 91 : 39-40

Effects of forest spraying with DDT on aquatic insects, food salmon and trout, in New Brunswick

WPA 36 (2) 356. Studies on the recovery of aquatic insect populations in tributaries of the Miramichi River, New Brunswick, after aerial forest spraying with DDT in oil, applied at a rate of 1/2 lb per acre.

**Anon.** (1962) F  
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*Science*, 137 (3533) : 894-5

New products

Portable dissolved oxygen and temperature recorder for use in streams and other bodies of water.

**Wilson, A. T. & H. W. Wellman** (1962) F  
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*Nature, Lond.*, 196 (4860) : 1171-3

Lake Vanda: An Antarctic lake

The lake is shown to be a natural example of the trapping and storing of solar energy by a salt water density gradient, and some observations on algal ecology are made.

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*Proc. stheast. Ass. Game Comm.*, 13 : 181-91

A portrait of river basin studies in the southeast

General history and account of work of Branch of River Basin Studies,  
U.S. Bureau of Sport Fisheries and Wildlife.

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*Proc. stheast. Ass. Game Comm.*, 13 : 192-7

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Rapid detection of chlorinated hydrocarbon insecticides in aqueous suspension with *Gammarus lacustris lacustris* (Sars.)

A freshwater shrimp common in prairie freshwater lakes and ponds and readily collected and cultured found to be a sensitive bioassay organism for the rapid detection of chlorinated hydrocarbon insecticides in aqueous suspension.

**Richard, J. B.** (1962)

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*Progr. Fish Cult.*, 24 (4) : 177-81

Tests on thermocline penetration by several rotenone products

**Mayhew, J.** (1962)\*

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[Des Moines?] State Conservation Commission, Biology Section, 23 p.

Thermal stratification and its effect on fish and fishing in Red Haw Lake, Iowa

**de Araoz, J.** (1962)

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*Bull. World Hlth Org.*, 27 (1) : 99-124

Study of water flow velocities in irrigation canals in Iraq and their mathematical analysis. Fr

This paper describes the procedure employed in and the results obtained from a study designed to elucidate the water flow phenomenon through analysis of the relative variations of water velocity at any point of the cross-section of the canal. From this study it was possible to derive a simplified method for measuring the rate of water flow in earth canals that may be of wide application in snail control by the use of molluscicides.



**Anon. (1961)**  
Prague, 54 p.

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Hydraulic Research Institute, 1920-1960

WPA 36 (2) 176. The historical development of the Hydraulic Research Institute, Prague, is reviewed. The work of the institute and its branch laboratories at Bratislava, Brno and Ostrava is illustrated, showing work on many aspects of water management including conservation; the regulation and survey of rivers and reservoirs, including model studies and studies on pollution; utilization of water power; treatment and supply of water for domestic, industrial and agricultural use; and studies on domestic and industrial waste waters, including treatment and toxicity.

**Victoria. State Rivers and Water Supply Commission (1961)**  
*Rep. Vict. Riv. Wat. Supply Comm.*, 106 p.

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8-10103

WPA 36 (2) 184. Contains information on a new herbicide for controlling submerged weeds, effective for 6-8 miles without leaving any traces of toxic material in the water. Work was also carried out on the pollution of water in irrigation channels and drains by herbicides, the rate of breakdown of the herbicide after spraying and the effect on pastures and crops of traces of herbicides in the irrigation water.

**Bezler, F. I. & N. A. Trifonova (1960)**  
*Bull. Inst. Biol. Vodokhr.*, 8/9 : 72-8

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Materialy po raspredeleniiu kisloroda v Rybinskom vodokhranilishche v zimnii period (Data on the distribution of oxygen in the Rybinsk reservoir in the winter)

BA 39E (3) 9274.

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*Péče o Čistotu Vod*, (7) : 40-63

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Changes in the quality of the Vltava water after the construction of the reservoir system and their deteriorative action on the building materials

WPA 36 (2) 212.

**U.K. Department of Scientific and Industrial Research (1960)**  
*Notes Wat. Poll.*, (8) : 4 p.

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Sampling natural waters and polluting liquids

WPA 36 (2) 218. Explains the difficulties encountered in assessing the quality of surface waters, sewage or sewage effluents, and trade waste waters, owing to variations in the composition of these liquids and changes in composition which may occur after sampling before the samples can be analysed; and describes the precautions to be taken, the operation of hand and automatic samplers, and the planning of a sampling programme.

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Treatment in fishponds of waste waters from the milk industry

WPA 36 (2) 310. Dairy waste waters, diluted with river water, were passed over cascades and through pond used for carp breeding. The effect on the oxygen content of the receiving stream is described.

**Pytlík, R. (1960)**

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*Chem. Zbl.*, 131 : 16554

(Treatment and utilization of press waste waters from potato starch factories in oxidation ponds). *De*

WPA 36 (2) 312. Waste waters were collected in ponds, strongly limed, and allowed to settle for some months, after which carp were introduced. Good development of fish and complete purification of the waste waters are recorded.

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Resources for the Future, Inc., 116 p.

Water pollution

WPA 36 (2) 342. Constitutes a report on studies which have been made to assess the best allocation of research resources in solving water pollution problems in the U.S.A., with emphasis on the technical and economic aspects.

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*Bull. Hokkaido Fish. Res. Lab.*, (25) : 26-57

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8-10180*C.R. Acad. Sci., Paris*, 256 (4) : 1003-5

Résultats systématiques de l'étude microstructurale et minéralogique de la coquille des Gastéropodes Muricidés (Systematic results of the microstructural and mineralogical study of the gastropod Muricinae shell)

Preliminary note reporting observations under polarized light and under Debye and Scherrer spectra, of slides of shells of 350 spp. (including fossil spp.) of Muricinae.



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- Muus, B. J.** (1962) M  
8-10181  
*Medd. Grønland*, 81 (5) : 23 p.  
 Cephalopoda

Three octopods (one new to science) and four decapods recorded in west Greenland waters: descriptions and distribution.

- Curtis, A. S. G.** (1962) M  
8-10182  
*Nature, Lond.*, 196 (4851) : 245-8  
 Pattern and mechanism in the reaggregation of sponges

- Schotter, G. & J. Cabioc'h** (1963) M  
8-10183  
*C.R. Acad. Sci., Paris*, 256 (6) : 1336-9  
 Sur les organes mâles de *Rissoella verruculosa* (Bertol.) J. Ag. (Floridées)  
 (On the male organs of *Rissoella verruculosa* (Bertol.) J. Ag. Florideae)

Preliminary note reporting the finding of new type of male organ.

- Guinot, D.** (1962)\* M  
8-10184  
*Opusc. zool., München*, (60) : 14 p.  
 Sur quelques crustacés décapodes brachyours indo-pacifiques des collections du Musée de Munich (On some Indopacific Crustacea Decapoda Brachiura from the collection of the Museum in Munich)

- Rebhun, L. I.** (1962) M  
8-10185  
*J. ultrastruct. Res.*, 6 : 107-22  
 E.M. studies on vitelline membrane of surf clam, *Spisula solidissima*

IABS 27 (2) 4223. It is suggested that the term, vitelline membrane, should apply to the complex of microvilli and fibrillar layers.

- Bellan-Santini, D.** (1961) M  
8-10186  
*Rec. Trav. Sta. mar. Endoume*, 37 *Bull.* (23) : 19-30

Note préliminaire sur la faune et la flore du peuplement à *Petroglossum nicaense* (Duby) Schotter et sur les rapports avec le peuplement à *Cystoseira stricta* (Mont.) Sauvageau (Preliminary note on the flora and fauna of the *Petroglossum nicaense* (Duby) Schotter biocenosis and its relation with *Cystoseira stricta* (Mont.) Sauvageau biocenosis)

Ecological remarks and lists of spp. observed at some stations on the French Mediterranean coast.

M

**Masse, H.** (1961)

8-10187

*Rec. Trav. Sta. mar. Endoume*, (37) *Bull.* (23) : 31-5

Note préliminaire sur le peuplement des sables grossiers et fins graviers d'étage infralittoral aux environs de Marseille (Preliminary note on the biocenosis of the coarse sand and gravel of the infralittoral zone in the vicinity of Marseille)

Studies the ecology of the spp. in relation to the characteristics of the substratum.

M

**Laborel, J.** (1961)

8-10188

*Rec. Trav. Sta. mar. Endoume*, (37) *Bull.* (23) : 37-60

Le concrétionnement algal "coralligène" et son importance géomorphologique en Méditerranée (The algae concretion "coralligene" and its geomorphological influence in the Mediterranean)

Review based on literature and direct observations, particularly on the French coast, Siculo-Tunisian Ridge and the Aegean Sea. Part played by the most important spp. *Pseudolithophyllum expansum*, *Neogoniolithon mammosum*, *Lithoamnion philippii* and *Peyssonellia polymorpha*, ecology and evolution of the biocenosis.

M

**Bellan, G.** (1961)

8-10189

*Rec. Trav. Sta. mar. Endoume*, (37) *Bull.* (23) : 71-83

Polychètes de la campagne 1956 du 'Gyf' dans le nord de la Corse (Polychaeta collected during the campaign of the 'Gyf' in the north of Corsica)

Lists the species with short ecological comments.

M

**Bellan, G.** (1961)

8-10190

*Rec. Trav. Sta. mar. Endoume*, (37) *Bull.* (23) : 85-112

Annélides Polychètes de la région de Bonifacio (Corse) (Annelida Polychaeta of the Bonifacio region (Corsica))

List of species with bionomic and ecological remarks. Discusses the characteristics of some biocenoses and the value of some indicator species.

M

**Bellan, G.** (1961)

8-10191

*Rec. Trav. Sta. mar. Endoume*, (37) *Bull.* (23) : 113-20

Contribution à l'étude de *Hyalinoecia bilineata* Baird (Contribution to the study of *Hyalinoecia bilineata* Baird)

Contains a taxonomic key to the spp. of *Hyalinoecia* of the Marseille region and discusses the systematics of the group.

- Amar, R. (1961)** M  
8-10192  
*Rec. Trav. Sta. mar. Endoume*, (37) *Bull.* (23) : 121-9  
*Jaeropsis mediterranea* n. sp. (Isopoda Asellidae) et les *Jaeropsis mediterraneennes* (*Jaeropsis mediterranea* n. sp. (Isopoda Asellidae) and the Mediterranean *Jaeropsis*)

Describes a n. sp. based on material from the gulf of Marseille; contains remarks on the other Mediterranean spp.

- Jacquotte, R. (1961)** M  
8-10193  
*Rec. Trav. Sta. mar. Endoume*, (37) *Bull.* (23) : 131-6  
 Sur la présence d'*Ebalia algerica* Lucas 1848 en Méditerranée nord occidentale (On the presence of *Ebalia algerica* Lucas 1848 in the north-western Mediterranean)

- Riedl, R. (1961)** M  
8-10194  
*Rec. Trav. Sta. mar. Endoume*, 37 (23) : 161-70  
 Etudes des fonds vaseux de l'Adriatique—méthodes et résultats (Studies of the muddy bottom of the Adriatic Sea—methods and results)

Text of a conference. Contains references on the equipment used, characteristics of the substratum and its ecological relations to the microfauna; zoo-geographical comments.

- Yonge, C. M. (1963)** M  
8-10195  
*New Scient.*, 17 (328) : 468-71  
 Animals that bore through rock

Coastal rocks and coral reefs are often riddled with bore-holes made by a variety of marine organisms, usually as a refuge. Some ingenious mechanical means have been evolved for the boring operation; in some cases the animal uses chemical action. Boring animals also attack oysters and concrete caissons.

- Santini, D. (1961)** M  
8-10196  
*Rec. Trav. Sta. mar. Endoume*, (37) *Bull.* (23) : 61-70  
 Note sur les peuplements sciaphiles de l'étage infralittoral rocheux de la région de Bonifacio (Note on the biocoenosis in the shade of the rocky infralittoral zone in the Bonifacio region)

Study of flora and fauna with ecological remarks.

- Manning, R. B. (1961)\*** M  
8-10197  
*Notul. nat. Acad. Philad.*, (348) : 7 p.  
 Notes on the caridean shrimps, *Rhynchocinetes rigens* Gordon (Crustacea, Decapoda), in the western Atlantic

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**Chace, F. A. (1962)\***

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8-10198

*Proc. U.S. nat. Mus.*, 113 (3466) : 605-35

The non-brachyuran decapod crustaceans of Clipperton Island

**Broch, H. (1961)**

M  
8-10199

*Sci. Res. Norweg. antarct. Exped.*, 3 (38) : 32 p.

Benthonic problems in Antarctic and Arctic waters

Review of basic hydrographic and biological conditions of Arctic and Antarctic benthonic fauna; brief remarks on occurrence of various species in Antarctic.

**Sharp, D. T. & I. E. Gray (1962)**

M  
8-10200

*Ecology*, 43 (2) : 309-13

Studies on factors affecting the local distribution of two sea urchins, *Arbacia punctulata* and *Lytechinus variegatus*

This paper records studies that have been undertaken to discover some of the factors affecting the separate distributional patterns of *Arbacia* and *Lytechinus* in the Beaufort area. Special emphasis is given to the effects of light on vertical migration and on the heaping response of *Lytechinus*.

**Urban, E. K. (1962)**

M  
8-10201

*Ecology*, 43 (2) : 320-3

Remarks on the taxonomy and intertidal distribution of *Littorina* in the San Juan Archipelago, Washington

**Horridge, G. A. & R. A. Chapman (1964)\***

M  
8-10202

*Quart. J. micr. Sci.*, 105 (2) : 175-83

Sheaths of the motor axons of the crab *Carcinus*

**Prunus, G. (1963)**

M  
8-10203

*C.R. Acad. Sci., Paris*, 256 (9) : 2043-5

Sur l'existence d'un dimorphisme chez les mâles d'une population de *Jaera marina syei* Bocquet (Isopode Asellote) (On the existence of a dimorphism among the males of a population of *Jaera marina syei* Bocquet (Isopoda, Asellata))

Record of secondary sexual character in the anterior pereopods of the males.

**Nielsen, B. J. (1962)**

M  
8-10204

*Aust. J. Sci.*, 25 (5) : 224

Presence of giant nerve fibres in a lamellibranch mollusc

Demonstration of occurrence of these fibres in *Katelsysia rhytiphora* Lamy.



**Forest, J. & D. Guinot** (1962)

M

8-10205

*Oah. Pacif.*, (4) : 41-75

Remarques biogéographiques sur les crabes des archipels de la Société et des Tuamotu (Biogeographical observations on the crabs of the Society and Tuamotu Archipelagos)

Discussion of the general distribution of spp. recorded from this archipelago and a comparison of the eastern Polynesian brachyuran faunas with those of other regions of the world. The data are presented as a table of distribution of 187 spp. through 24 regions of the world.

**Gill, E. D.** (1962)

M

8-10206

*J. malac. Soc. Aust.*, (6) : 34-7

Past and present distribution in Australia of the gasteropod *Tylospira*

The family Struthiolariidae is represented in Australia by *Tylospira* (*Tylospira*) and *Tylospira* (*Singletonaria*). Their geological history from the Miocene to the present is clarified. The only living representative is *Tylospira* (*T.*) *scutulata*, which is the type species of the genus.

**Wisely, B.** (1962)

M

8-10207

*J. malac. Soc. Aust.*, (6) : 37-9

An outline of the development of the bivalve gastropod *Midorigai australis* Burn, 1960

Ill. description of development to veliger just before hatching with operculum and protoconch. Issued also as: *Coll. Repr. Div. Fish. C.S.I.R.O.* (476).

**Marsh, J. A.** (1962)

M

8-10208

*J. malac. Soc. Aust.*, (6) : 40-2

Two new cone shells (Mollusca, Conidae) from Queensland

Ill. description of *Conus* (*Leptoconus*) *nielsenae* sp. nov. and *Conus* (*Leptoconus*) *sculletti* sp. nov.

**Berreur-Bonnenfant, J.** (1963)

M

8-10209

*C.R. Acad. Sci., Paris*, 256 (10) : 2244-6

Survie et activité des gonades et de la glande androgène des mâles d'*Orchestia gammarella* en culture organotypique (Survival and activity of gonads and androgenous gland of males of *Orchestia gammarella* in organotypical culture)

Results of observations on cultivated glands and gonads.

- Mulicki, Z.** (Chelkowski, M. Transl.) (1961)\*  
 Pl-480 Int., 58 p. M  
8-10210

Ecology of the more important benthic invertebrates in the Baltic Sea

En 59-3583. Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

- Araya, H. & S. Kawasaki** (1962)  
*Bull. Hokkaido Fish. Res. Lab.*, (25) : 11-9 M  
8-10211

(On the locomotion of the squids, *Ommastrephes sloani pacificus* (Steenstrup), in the Okhotsk Sea along the coast of Hokkaido during the autumn of 1961).  
*Ni En*

Examination of the distribution of this sp. by tagging and by analysis of frequency distributions of mantle length and other features.

- Hamabe, M.** (1962)  
*Bull. Japan Sea Fish. Res. Lab.*, (10) : 1-46 M  
8-10212

(Embryological studies on the common squid, *Ommastrephes sloani pacificus* Steenstrup, in the southwestern waters of the Sea of Japan). *Ni En*

Observations on copulation and spawning behaviour; early embryonic development, hatching, morphological features of newly hatched larvae; postlarval formation of the fourth arm and the tentacle in the rhynchoteuthis larva.

- Hamabe, M.** (1962)  
*Zool. Mag. Tokyo*, 71 (3) : 65-70 M  
8-10213

(Studies on breeding habit and larval development of the squid, *Ommastrephes sloani pacificus* Steenstrup. 5. Formation of the arm and the tentacle in the rhynchoteuthis larvae). *Ni En*

Because of the length of time taken for formation of the fourth arm this study had to be continued by collection of larvae from nature, the sequential continuity being established on morphological evidence. Ci 62-02101 and 62-02102.

- Utinomi, H.** (1962)  
*Zool. Mag., Tokyo*, 71 (3) : 102-8 M  
8-10214

(Recent evidence for the northward extension of the range of some tropical echinoderms in Japanese waters). *Ni En*

Photographs and notes on 10 spp.

- Iwata, K. S.** (1962)  
*Zool. Mag., Tokyo*, 71 (9) : 301-2 M  
8-10215

(A simplified electric method of determining the sex of sea urchins). *Ni En*

Identification of eggs extruded under the stimulus of an alternating current passed between oral and aboral poles.

- M  
8-10216
- Fell, H. B.** (1962)  
*Trutara*, 10 (3) : 138-40  
 A classification of echinoderms

Chart presenting main features of a classification of the radially symmetrical groups of echinoderms.

- M  
8-10217
- Andrews, J. C. & D. T. Anderson** (1962)  
*Proc. Linn. Soc. N.S.W.*, 87 (2) : 185-8  
 The development of the polychaete *Galeolaria caespitosa* Lamarek (fam. Serpulidae). *Ni*

Ill. description of planktonic trochophores with notes on settlement.

- M  
8-10218
- Kay, A.** (1962)  
*Pacif. Sci.*, 16 (4) : 434-5  
*Julia exquisita* Gould, a bivalved gastropod

Notes on morphology. Issued also as: *Contr. Mar. Lab. Univ. Hawaii*, (173).

- M  
8-10219
- Kohn, A. J. & C. S. Weaver** (1962)  
*Pacif. Sci.*, 16 (4) : 349-58  
 Additional records and notes on *Conus* (Mollusca: Gastropoda) in Hawaii

- M  
8-10220
- Clark, W. C.** (1962)  
*N.Z.J. Sci.*, 5 (4) : 517-20  
*Pallenopsis triregia*, a new species of Pycnogonida from near Three Kings Islands, New Zealand

*Pallenopsis triregia* n. sp. characterized by having a glabrous trunk, widely spaced lateral processes, single-jointed chelifore scape and eight-jointed female oviger is described. A key to the four New Zealand species of the genus *Pallenopsis* is given.

- M  
8-10221
- Matsui, T.** (1962)  
*J. Shimonoseki Coll. Fish.*, 11 (3) : 587-93  
 (On the shedding of the spores of *Gloiopeltis tenax* (Turn.) J. Ag. and *G. furcata* Post. et Ripr. 5.). *Ni En*

- M  
8-10222
- Nishikawa, S.** (1962)  
*J. Shimonoseki Coll. Fish.*, 11 (3) : 539-76  
 A comparative study of the chromosomes in marine gastropods, with some remarks on cytotaxonomy and phylogeny

Chromosomes in male germ cells of 53 spp. representing 16 families and 3 orders; notes are given, for each sp., of habitat, and number and form of chromosomes; each is illustrated.

**Takeda, M. & E. Abe** (1962)M  
8-10223*J. Shimonoseki Coll. Fish.*, 11 (3) : 399-406(On isolation of crustacean chitin. 1. Decalcification by EDTA-<sub>2</sub>Na solution and enzymatic hydrolysis of incidental protein). *Ni En*

Rate of decalcification and nitrogen content of residue for each method.

**Krishnamurthy, K.** (1961)M  
8-10224*J. Mar. biol. Ass. India*, 3 (1/2) : 271-2Occurrence of a very early stage of *Parapegasus natans* (Linnaeus) from the nearshore waters of Porto Novo, South India

Morphological notes.

**Satyanarayana, A. V. V.** (1961)M  
8-10225*J. Mar. biol. Ass. India*, 3 (1/2) : 269-70A record of *Panulirus penicillatus* (Olivier) from the inshore waters off Quilon (Kerala)

Note on collection site and brief description of the specimen.

**Rangarajan, K. & C. Sankarankutty** (1961)M  
8-10226*J. Mar. biol. Ass. India*, 3 (1/2) : 265-7A note on abnormal *Leonnates jousseaumei* Gravier (Family Nereidae-Polychaeta). *Ni*

Morphological notes.

**Pillai, N. K.** (1961)M  
8-10227*J. Mar. biol. Ass. India*, 3 (1/2) : 267-9On the occurrence of *Microprosthema validum* Stimpson in Indian waters

Ill. morphological notes.

**Noble, A.** (1961)M  
8-10228*J. Mar. biol. Ass. India*, 3 (1/2) : 262-3A note on the occurrence of the blue green alga *Aphanocapsa littoralis* Hansg. var. *Macrocoeca* Hangs. causing colouration of the sand and its relation with the tides**Rao, K. V.** (1961)M  
8-10229*J. Mar. biol. Ass. India*, 3 (1/2) : 235-56On two opisthobranchiate molluscs, *Placobranchus ocellatus* Hasselt and *Discodoris boholiensis* Bergh, from Indian waters not hitherto been recorded

Ill. morphological description.



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- Rao, K. V.** (1961)  
*J. Mar. biol. Ass. India*, 3 (1/2) : 259-62  
 The pearl wing shell, *Pteria penguin* (Röding) from the Andaman Islands, India

Measurements and descriptive notes.

- M  
8-10231
- Rao, K. V. & K. Alagaraswami** (1961)  
*J. Mar. biol. Ass. India*, 3 (1/2) : 256-9  
 External morphology and early development of *Pleurobranchus* (*Oscanius*) sp. from Gulf of Mannar

Ill. description of adult and of early developmental stages.

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8-10232
- Larsson, S. G.** (1962)\*  
*Nord. Med.*, 67 : 816-8  
 (From protozoan to metazoan. 12. Crinoidea). *Da*

- M  
8-10233
- Manning, R. B.** (1962)  
*Crustaceana*, 4 (4) : 301-6  
 A redescription of *Lysiosquilla biminiensis pacificus* Borradaile (Stomatopoda)

Considers *L. b. pacificus* synonymous with *L. multifasciata*. Gives figures and a comparative table of characters for 4 closely related *Lysiosquilla* spp. Issued also as: *Contr. Mar. Lab. Univ. Miami*, (385).

- M  
8-10234
- Irukayama, K. et al.** (1962)\*  
*Jap. J. Hyg.*, 16 : 467-75

(11. Comparison of the mercury compound in the shellfish from Minamata Bay with various mercury compounds experimentally accumulated in the control shellfish.) *Ni*

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8-10235
- Hirayama, K., Y. Matsue & Y. Komaki** (1960)  
*Aquiculture, Tokyo*, (8) : 95-102

The effect of toxicity of nereistoxin upon aquatic animals

Experiments to determine the toxicity to fish and other aquatic animals of a paralytic poison isolated from the body of a marine annelid isome, *Lumbriconereis heteropods* Marenz.

- M  
8-10236
- Ranson, G.** (1962)  
 Paris, Editions P. Lechevalier, 99 p.  
 Missions dans le Pacifique (Missions in the Pacific)

Semi-popular account of visits to the Tuamotu Archipelago, Vietnam and Japan for the purpose of studying coral reefs in various aspects and the cultivation of pearl oysters.

- Macpherson, J. H. & C. J. Gabriel** (1962) M  
8-10237  
Melbourne. Melbourne University Press, 475 p.  
Marine molluscs of Victoria

Ill. handbook divided into parts dealing with Amphineura (chitons), Gastropoda (univalves), Scaphopoda (tusk shells), Pelecypoda (bivalves) and Cephalopoda (many-armed molluscs). 486 ill. of approximately the same number of spp. Each taxon is diagnosed, each main sp. is described, localities reported and some ecological notes given. Bibliography, glossary and index.

- McMichael, D. F.** (1962) M  
8-10238  
Brisbane, Jacaranda Press, 127 p.  
Some common shells of the Australian seashore

Popular pocket book. The introduction discusses scientific name, further reading, shell collecting and terminology. 287 spp. are illustrated, and brief notes are given on range, colour and size.

- Sankarankutty, C.** (1961) M  
8-10239  
*J. Mar. biol. Ass. India*, 3 (1/2) : 101-19  
On Decapoda Brachyura from the Andaman and Nicobar Islands. 1. Families Portunidae, Ocypodidae, Grapsidae and Mictyridae

Distribution notes, with morphological notes in some cases, of 30 spp. of which 9 are new records.

- Sankarankutty, C.** (1961) M  
8-10240  
*J. Mar. biol. Ass. India*, 3 (1/2) : 120-36  
On some crabs (Decapoda-Brachyura) from the Laccadive Archipelago

Distribution notes, with morphological notes in some cases, for 36 spp.

- Seshappa, G.** (1961) M  
8-10241  
*J. Mar. biol. Ass. India*, 3 (1/2) : 153-78  
Vertical distribution and general ecology of some of the common intertidal organisms of the Northumberland coast

Description of the site; distribution and general ecology of some of the common organisms; designation of discernible zonation.

- Rangarajan, K. & S. Mahadevan** (1961) M  
8-10242  
*J. Mar. biol. Ass. India*, 3 (1/2) : 179-85  
On a new species of *Nothria* Malmgren (Polychaeta, Annelida) from the Gulf of Mannar

Ill. morphological description with notes on habit and habitat, and key to *Nothria* spp. described from Indian waters.

- Røen, U.** (1962) MF  
8-10243  
*Grønland*, (9) : 335-41

Salt-og brakvandsdyr i grønlandske ferskvande (Animals from salt and brackish waters in freshwaters of Greenland). *Da* En

Observations in freshwater localities in Greenland of eight species of invertebrates which normally live in salt or brackish water.

- Clench, W. J. & R. D. Turner** (1962) MF  
8-10244  
*J. malac. Soc. Aust.*, (6) : 3-33

Monographs of the genera *Papustyla*, *FORCARTIA* and *Meliobba* (Papuinae: Camaenidae)

Description of spp. in the genera *Papustyla*, *FORCARTIA* (nov. gen.), and *Meliobba*, giving morphological description and in some cases anatomical notes resulting from discussions.

- Rao, K. V.** (1961) MF  
8-10245  
*J. Mar. biol. Ass. India*, 3 (1/2) : 186-97

Development and life history of a nudibranchiate gastropod *Cuthona adyarensis* Rao

A complete series of development stages from fertilised eggs to juveniles is described from specimens reared under laboratory conditions.

- Stefani, R.** (1961)\* MF  
8-10246  
*Riv. biol.*, 54 : 457-69

(Differences in the annual cycle of the amphigonic and parthenogenetic biotypes of *Artemia salina* of Cagliari). *It*

- Pillai, R. S.** (1961) MF  
8-10247  
*J. Mar. biol. Ass. India*, 3 (1/2) : 146-52

Studies on the shrimp *Caridina laevis* (Heller). 4. The neurosecretory system

Histo-cytological description and examination of the mode of secretion release. Co 8-10248.

- Pillai, R. S.** (1961) MF  
8-10248  
*J. Mar. biol. Ass. India*, 3 (1/2) : 137-45

Studies on the shrimp *Caridina laevis* (Heller). 3. The respiratory system

Description of branchial cavity, structure of branchiae, gill lamellae and nephrocytes, and experimental evidence on the mechanism and course of the respiratory current. Co 62-05110.

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**Bartley, T. R. & N. E. Otto** (1961)\* F  
8-10249

*Rep. chem. Engng Lab. U.S. Bur. Reclam.*, 29 p.

Progress report of field studies on submersed aquatic weeds in cooperation with the Northern Colorado Water Conservancy District 1960

**Kawai, K.** (1961) F  
8-10250

*Koso Kagaku Shimpojiumu*, 15 : 238-43

Hemoproteins in the gut fluids of molluscs

CA 57 (13) : 17222.

**Blasius, C.** (1962) F  
8-10251

*Protoplasma*, 55 : 497-51

Motility of the amebocytes of the blood of (the fresh water mussel) *Anodonta cygnaea*

CA 58 (3) : 2686.

**Kolenkine, X.** (1963) F  
8-10252

*C.R. Acad. Sci., Paris*, 256 (6) : 1381-4

Incorporation de thymidine tritiée chez *Hydra attenuata* normale et en cours de régénération (Incorporation of thymidine treated with tritium in *Hydra attenuata* during normal and regeneration period)

**Wiggins, C. B.** (1962) F  
8-10253

*Canad. J. Zool.*, 40 (5) : 879-91

A new subfamily of phryganeid caddisflies from western North America (Trichoptera: Phryganeidae)

The discovery of the larval, pupal, and egg stages of *Yphria californica* has provided the necessary evidence for a re-evaluation of the family designation and systematic relationships of this unique species. A new subfamily, the Yphriinae, is, however, created in the Phryganeidae to receive this single species. Descriptions of all stages of the species are given, also observations on the ecology and behaviour.

**Motas, C.** (1961) F  
8-10254

*Zool. Iceland*, 3 (55) : 20 p.

Halacaridae

Lists 8 species recorded in Iceland; notes on ecology and distribution.

**Hardcastle, W. S.** (1962) F  
8-10255

*Louisiana Conserv.*, 14 (5-6) : 14-6, 21

Progress report: Aquatic vegetation control

Co 62-05384. With specific reference to Louisiana discusses research and control.



**Stiven, A. E.** (1962)  
*Ecology*, 43 (2) : 325-8

F  
 8-10256

The effect of temperature and feeding on the intrinsic rate of increase of three species of *Hydra*

The species studied were *Hydra littoralis*, *Chlorophydra viridissima* and *Hydra pseudoligactis*.

**Webbe, G.** (1962)  
*Bull. World Hlth Org.*, 27 (1) : 59-86

F  
 8-10257

The transmission of *Schistosoma haematobium* in an area of Lake Province, Tanganyika. Fr

Records the results of studies carried out over a two-year period. The ecology of a variety of snail habitats is described, and data on the biology of the principal molluscan host (*Bulinus (Physopsis) nasutus productus*), on seasonal fluctuations in its population density and associated cercarial infection rates, on its response to dessication and on other aspects of population dynamics are presented and discussed.

**Olivier, L., W. T. Haskins & J. Gurian** (1962)  
*Bull. World Hlth Org.*, 27 (1) : 87-94

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 8-10258

The action of very low concentrations of sodium pentachlorophenate on freshly laid eggs of *Australorbis glabratus*. Fr

Techniques for collecting the eggs without damage and for conducting the tests are described. The demonstration of greater susceptibility of the eggs to the compound suggests that snail control might be accomplished more economically in some situations if the chemical were directed primarily against the eggs. The possibility of using eggs instead of adults for screening potential molluscicides is also discussed.

**Meyling, A. H., C. H. J. Schutte & R. J. Pitchford** (1962)  
*Bull. World Hlth Org.*, 27 (1) : 95-8

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Some laboratory investigations on Bayer 73 and ICI 24223 as molluscicides. Fr

Report on tests of chemical properties and molluscicidal activity. Describes the method used for the determination of ICI 24223.

**Crossland, N. O.** (1962)  
*Bull. World Hlth Org.*, 27 (1) : 125-34

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 8-10260

A mud-sampling technique for the study of the ecology of aquatic snails, and its use in the evaluation of the efficacy of molluscicides in field trials. Fr

Describes a sampling technique suitable for estimating the population densities of African aquatic snails in the field by the removal of a plug of mud and its subsequent detailed examination.

**Mandahl-Barth, G. (1962)**F  
8-10261*Bull. World Hlth Org.*, 27 (1) : 135-50

Key to the identification of east and central African freshwater snails of medical and veterinary importance

This identification key has been prepared to enable field workers in eastern and central Africa to identify the species and subspecies of snails acting as intermediate hosts of various flukes causing bilharziasis and related diseases in man and his domestic stock. The area covered by the key is eastern Africa, from the Sudan and Somalia in the north to Southern Rhodesia in the south. The key includes all species and subspecies of the three medically and veterinarily important genera, *Lymnaea*, *Bulinus* and *Biomphalaria*. All other freshwater pulmonates of the area can be identified as to genus only. Those features of the shells and soft parts of snails which are used in identification are discussed in some details, and indications are given as to methods of collection, preservation and dissection of snails.

**McCullough, F. S. (1962)**F  
8-10262*Bull. World Hlth Org.*, 27 (1) : 161-70Further observations on *Bulinus* (*Bulinus*) *truncatus rohlfsi* (Clessin) in Ghana. Fr**Ritchie, L. S., M. G. Radke & F. F. Ferguson (1962)**F  
8-10263*Bull. World Hlth Org.*, 27 (1) : 171-81Population dynamics of *Australorbis glabratus* in Puerto Rico Fr.

This report on the population dynamics of *Australorbis glabratus* in Puerto Rico is based on observations made over about two years at 50 collecting-sites in a representative range of snail habitats.

**Yeo, D. (1962)**F  
8-10264*Bull. World Hlth Org.*, 27 (1) : 183-7

A preliminary statistical analysis of snail counts

One problem in research into the epidemiology and control of bilharziasis is the adequate statistical examination of snail counts. This note describes a semi-empirical approach to the problem, which may be of value and may tempt a trained statistician into a more comprehensive and informed study.

**Suzuki, S. & T. Hatakeyama (1961)**F  
8-10265*Jap. J. Ecol.*, 11 : 173-5

Ecological studies on the aquatic fungi in lake Yamanakako

WPA 36 (2) 208. Study on seasonal distribution in a Japanese lake.

**Suzuki, S. (1961)**F  
8-10266*Jap. J. Ecol.*, 11 : 219-21

Some considerations on anaerobic life of aquatic fungi in lake bottom

WPA 36 (2) 209. Field observations and laboratory experiments on the effect of oxygen tension on fungal activity.

- Miura, Y.** (1962) F  
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*Jap. J. Zool.*, 13 (2) : 267-74

Three new harpacticoid copepods from the subterranean waters of Shikoku in Japan I.

Morphological description of *Nitocrella japonica* n. sp., *N. Yokotai* n. sp. and *Attheyella morimotoi* n. sp.

- Ito, T.** (1962) F  
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*Jap. J. Zool.*, 13 (2) : 275-92  
Groundwater copepods from the Ryu-Kyu Islands

Descriptions of 15 new spp. collected in 39 localities (wells and caves); tables are given of measurements and counts made on specimens.

- Stanley, G. J., Jr.** (1963) F  
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*Science*, 139 (3554) : 484-5  
A stonefly aquatic in the adult stage

Brief note on an undescribed sp. of Plecoptera of the genus *Capnia* from California and Nevada which appears to pass its entire life history at depths of 200-264 feet.

- Gurevich, A. A.** (1961)\* F  
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*Bot. Zh.*, 46 (1) : 112-5

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Trans. A-1307 : 11 p.

Observations of zygote formation and germination in *Spirogyra weberi* Kütz

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Photoreduction at  $\lambda$  705 m $\mu$  in adapted algae

NSA 17 (2) 1187. Results are reported from studies on the mechanism of oxygen evolution from water in the light in green algae. Photosynthesis and photoreduction at various light intensities were measured in the same cell in *Ankistrodesmus* and in a mutant of *Scenedesmus*.

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 Paper presented at the 39th National Annual Meeting of the American Society of Ichthyologists and Herpetologists, San Diego State College, San Diego, California, 9 p.  
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Ellobiopsidae from the Pacific

Parasite *Amallocystis capillosus* has appeared on shrimp *Pasiphaea pacifica*. This is first report of this group from north-eastern Pacific Ocean. Parasite causes morphological modification of rostrum of host.

**Verheijen, F. J.** (1962)

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Gas spitting by alarmed fish disturbs their hydrostatic equilibrium

During experiments into occurrence of alarm substance in some North American fish gas spitting related to downward movements was observed in the hornyhead chub (*Hybopsis biguttata* Kirtland, Cyprinidae) and in the white sucker (*Catostomus commersoni* Lacépède, Catostomidae).

**Runyan, S.** (1961)\*

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Occurrence and distribution of catecholamines in fish brain

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Describes the method and results obtained using *Mugil* spp. *cephalus*, *capito* and *auratus*, *Morone labrax*, *Scorpaena scrofa*, *S. porcus*, *Diplodus annularis*, *Gadus capelanus*, *Hippocampus guttulatus*, *Pagellus erythrinus*, *Scyllium stellare*.

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 (Evolutional research on the caudal neurosecretory system of salmon-trout).  
*Ni*
- Reichert, L. E.** (1962)\* MF  
*Gen. comp. Endocr.*, 2 : 283-5 8-10431  
 Proteinases of the pituitaries of several fish and of a whale
- Baggerman, B.** (1962)\* MF  
*Gen. comp. Endocr. Suppl.*, 1 : 188-205 8-10432  
 Some endocrine aspects of fish migration
- Egami, N. & S. Ishii** (1962)\* MF  
*Gen. comp. Endocr. Suppl.*, 1 : 248-53 8-10433  
 Hypophyseal control of reproductive functions in teleost fishes
- Fontaine, M. & J. Leloup** (1962)\* MF  
*Gen. comp. Endocr.*, 2 : 317-22 8-10434  
 (Thyroid function of the adult salmon (*Salmo salar* L.) during various stages of its migratory cycle). *Fr*
- Hoar, W. S.** (1962)\* MF  
*Gen. comp. Endocr. Suppl.*, 1 : 206-16 8-10435  
 Reproductive behaviour of fish
- Uno, T., T. Tokunaga & M. Nakamura** (Kudo, G. Transl.) (1960)\* MF  
 11 p. 8-10436  
 Chemical studies on the body tissues of the salmon, *Oncorhynchus keta*, after spawning  
*En* 1956, Uno, T., T. Tokunaga & M. Nakamura. Available from Office of Technical Services, Department of Commerce, Washington, D.C.
- Pora, E. A., C. Wittenberger & I. Oros** (1962)\* MF  
*J. Physiol. Path. gén.*, 54 : 402 8-10437  
 (Research on the physiology of the red muscle of teleosts). *Fr*
- Ramaswami, L. S.** (1962)\* MF  
*Gen. comp. Endocr. Suppl.*, 1 : 286-99 8-10438  
 Endocrinology of reproduction in fish and frog
- Yamamoto, T.** (1962)\* MF  
*Gen. comp. Endocr. Suppl.*, 1 : 341-5 8-10439  
 Hormonic factors affecting gonadal sex differentiation in fish

- MF  
8-10440
- Kallman, K. D.** (1962)  
*J. Genet.*, 58 (1) : 7-21  
Gynogenesis in the teleost, *Mollienesia formosa* (Girard), with a discussion of the detection of parthenogenesis in vertebrates by tissue transplantation  
Describes experiments using descendants of individuals collected near Brownsville, Texas, and the eastern Florida area.
- F  
8-10441
- Davis, R. A.** (1963)  
*Ann. appl. Biol.*, 51 : 345-8  
Feral coypus in Britain  
Discusses distribution of *Myocastor coypus* in E. England.
- F  
8-10442
- Iankov, G.** (1961)\*  
*Ribno Stop.*, (5) : 15-7  
Lechenie na ikhtioftiriazisa pri pusturvite (Treatment of ichthyophthiriasis in trouts). *Bu*
- F  
8-10443
- Crossman, E. J.** (1962)\*  
*Contr. Life Sci. Div. Ont. Mus.*, (55) : 29 p.  
The grass pickerel *Esox americanus vermiculatus* Le Sueur in Canada
- F  
8-10444
- Boschi, E. E. & M.-L. Fuster de Plaza** (1959)\*  
*Publ. Dep. Invest. pesq. Repub. argent.*, (8) : 61 p.  
Estudio biológico pesquero del pejerrey del embalse del Rio III (*Basilichthys bonariensis*). Con una contribución al conocimiento limnológico del ambiente (Fisheries biological study of the silverside from Rio Tercero (*Basilichthys bonariensis*). With a contribution to the limnological knowledge of the environment)
- F  
8-10445
- Gordon, M. S.** (1959)\*  
*Anat. Rec.*, 134 (3) : 571-2  
Rates of exchange of chloride ions in rainbow trout (*Salmo gairdneri*) acclimated to various salinities
- F  
8-10446
- Matty, A. J. & K. Green** (1963)  
*J. Endocrin.*, 25 (4) : 411-25  
Permeability and respiration effects of thyroïdal hormones on the isolated bladder of the toad *Bufo bufo*
- F  
8-10447
- Isaev, A. I.** (Ed.) (1959)\*  
Moskva, Pishchepromizdat, 374 p.  
Spravochnik po prудovomu rybovodstvu (Manual on pond culture)



# AQUATIC STOCKS

**Sabaneev, L. P. (1960)\*** F  
8-10448  
Kaliningradskoe knizhnoe izd-vo, 660 p.  
Zhizn' i lovia presnovodnykh ryb (Life and catch of freshwater fishes)

**Mekhanik, F. Ya. (1959)\*** F  
8-10449  
16 p.  
Growth and metabolism of Ladoga salmon and rainbow trout fry under different temperatures

En 1956, Mekhanik, F. Ya. Available from the Library of Congress, Washington, D.C.

**Legendre, V. (1960)\*** F  
8-10450  
*Jeune Nat.*, 10 (9-10) : 177-212  
Clef des Cyprinidés ou ménés du Québec (Key to the cyprinids of Quebec)

**Ammon, R. & H. Bockendahl (1962)** F  
8-10451  
*Arzneimittel-Forsch.*, 12 : 812-5  
Reversal of goldfish poisoning by organic phosphates  
CA 57 (13) : 17226.

**Schanzel, H. & E. Hegerova (1961)** F  
8-10452  
*Sborn. vys. Šk. zeměd. lesn. Fak. Brna*, (3/4) : 261-4  
Toxic effect of sodium pentachlorophenolate on fishes

CA 57 (13) : 17227. Na pentachlorophenolate affects innfish (*Rutilus rutilus*) unfavorably. The effect is directly proportional with time and its concn. Use of this against *Galba truncatula* should be very limited. Its application against slugs is more promising.

**Motelica, I. (1961)** F  
8-10453  
*Rev. biol. Acad. Roum.*, (6) : 467-75  
The influence of adrenaline on the glycemia of carp  
CA 57 (13) : 17228.

**Deminatti, M. & M. M. Zahnd (1962)** F  
8-10454  
*C. R. Soc. Biol., Paris*, 156 : 925-6  
Histoautoradiographic study of penetration of sodium sulfate-S<sup>35</sup>, methionine-S<sup>35</sup>, and phenylalanine-H<sup>3</sup> into the embryo of an ovoviviparous fish, *Mollinnesia*

CA 58 (3) : 2682.

**Tahsin Mohsen, M.** (1963)

F  
8-10455

*C.R. Acad. Sci., Paris*, 256 (6) : 1385-7

Sur le système génital mâle chez *Jenynsia lineata* (Cyprinodontiformes, Jenynsiidae) et les affinités phylogénétiques de cette espèce avec les familles voisines (On the male genital system in *Jenynsia lineata* (Cyprinodontiformes, Jenynsiidae) and the phylogenetic affinities of this species with related families)

Preliminary note; reports anatomical observations and discusses affinities with Anablepidae and Goodeidae.

**Girgis, S.** (1961)

F  
8-10456

*Comp. Biochem. Physiol.*, 3 : 206-17

Aquatic respiration in the common Nile turtle, *Trionyx triunguis* (Forsk.)

IABS 24 (3) 6438. The quiet submerged animal used up 6.5 ml. O<sub>2</sub>/kg./hr. Of this pharyngeal respiration used up approx. 30%, the remainder being due to cutaneous respiration.

**Swift, D. R.** (1962)

F  
8-10457

*Comp. Biochem. Physiol.*, 6 : 91-3

Evidence for absence of an endogenous growth-rate rhythm in brown trout (*Salmo trutta* Linn)

IABS 27 (3) 6873. Brown trout grown under const. temp. conditions with a standard diet do not show rhythmic growth cycles. All fish tended to grow at the rate of 1%/week.

**Elkan, E.** (1962)

F  
8-10458

*Nature, Lond.*, 196 (4858) : 958-60

*Dermocystidium gasterostei* n. sp. a parasite of *Gasterosteus aculeatus* L. and *Gasterosteus pungitius* L.

**Surber, E. W.** (1959)

F  
8-10459

*Proc. stheast. Ass. Game Comm.*, 13 : 313-25

Suggested standard methods of reporting fish population data for reservoirs; prepared for the Reservoir Committee, Southern Division of the American Fisheries Society

**Lawrence, J. M.** (1960)

F  
8-10460

*Proc. stheast. Ass. Game Comm.*, 14 : 257-8

Estimated sizes of various forage fishes chain pickerel can swallow

Presents, in tabular form, a preliminary estimate of the sizes of gizzard shad, *Dorosoma cepedianum*, bluegills, *Lepomis macrochirus*, golden shiner, *Notemigonus crysoleucas*, and green sunfish, *Lepomis cyanellus*, that various sizes of chain pickerel, *Esox niger*, can swallow.

**Pasztor, V. M. & H. Kleerekoper** (1962)

*Canad. J. Zool.*, 40 (5) : 785-802

The role of the gill filament musculature in teleosts

A study of gill filaments using visual and oscillographic methods.

F

8-10461

**Saunders, R. L.** (1962)

*Canad. J. Zool.*, 40 (5) : 817-62

The irrigation of the gills in fishes: 2. Efficiency of oxygen uptake in relation to respiratory flow activity and concentration of oxygen and carbon dioxide

Co 62-03961. Respiratory volumes, percentage utilizations of oxygen, and rates of oxygen consumption were measured in non-swimming and swimming white suckers, brown bullheads, and carp under various ambient levels of oxygen and carbon dioxide.

F

8-10462

**Allison, L. N.** (1962)

*Progr. Fish Cult.*, 24 (4) : 155

Cataract among hatchery-reared lake trout

Data suggests that prolonged exposure to direct sunlight of young lake trout (*Salvelinus namaycush*) causes cataract formation.

F

8-10463

**Needham, P. R. & R. J. Behnke** (1962)

*Progr. Fish Cult.*, 24 (4) : 156-8

The origin of hatchery rainbow trout

Discusses origin of the hatchery rainbow trout in the U.S. and presents evidence that the original Shasta rainbow used was a mixture of two types of rainbows.

F

8-10464

**Surber, E. W. & Q. H. Pickering** (1962)

*Progr. Fish Cult.*, 24 (4) : 164-71

Acute toxicity of endothal, diquat, hyamine, dalapon, and silvex to fish

Summary of the results of a study of the acute toxicity to fish of herbicides that showed promise in control of submersed aquatic plants. Endothal, diquat, silvex, hyamine 1622, hyamine 2389 and dalapon were tested.

F

8-10465

**Normandeau, D. A.** (1962)

*Progr. Fish Cult.*, 24 (4) : 172-6

Microhematocrit values for some salmonids reared in New Hampshire

An attempt was made to set up a statewide norm, but each station varied so greatly that this was not possible.

F

8-10466

- F  
8-10467
- Gilbert, C. R.** (1964)  
*Bull. Fla St. Mus. biol. Sci.*, 8 (2) : 95-194  
The American cyprinid fishes of the subgenus *Luxilus* (genus *Notropis*)
- F  
8-10468
- Richards, M.** (1961)\*  
Boise, Idaho Fish and Game Dept., Fisheries Division, 42 p.  
Tests for increasing the returns of hatchery trout
- F  
8-10469
- Ablan, G. L. & W. M. Rosario** (1962)\*  
*Fish. Gaz., Quezon City*, 6 (1) : 6 p.  
Method of collecting and transporting live teuthid fry (padas) for stocking
- F  
8-10470
- Fontenele, O.** (1959)\*  
*Publ. Serv. Piscic., Fortaleza*, (177) : 15 p.  
Contribution to the biology of the pirarucu, *Arapaima gigas*—(Cuvier) in captivity (Actinopterygii, Osteoglossidae)
- F  
8-10471
- Krefft, G.** (1961)\*  
*Arch. Fisch Wiss.*, 12 (1/2) : 24-38  
*Beryx splendens*, ein Erstfund in nordeuropäischen Gewässern nebst Bemerkungen zum Auftreten von *B. decadactylus* (First record of *Beryx splendens* in north European waters with notes on the occurrence of *B. decadactylus*). En
- F  
8-10472
- Bond, C. E.** (1961)\*  
*Tech. Bull. agric. Sta., Corvallis*, (58) : 42 p.  
Keys to Oregon freshwater fishes
- F  
8-10473
- McMullen, D. B. et al.** (1962)  
*Bull. World Hlth Org.*, 27 (1) : 25-40  
Bilharziasis control in relation to water resources development in Africa and the Middle East. Fr  
Includes discussion of use of molluscicides and herbicides and relation of bilharziasis to fish culture.
- F  
8-10474
- McMullen, D. B. & J. Francotte** (1962)  
*Bull. World Hlth Org.*, 27 (1) : 5-24  
Report on a preliminary survey by the WHO Bilharziasis Advisory Team in Upper Volta. Fr  
Survey made in 1960. In addition to discussion of epidemiologist, etc., includes report on incidence of vectors in fish ponds, no. of ponds, ecological data for freshwaters.



# AQUATIC STOCKS

- Malek, E. A.** (1962) F  
8-10475  
*Bull. World Hlth Org.*, 27 (1) : 41-58

Bilharziasis control in pump schemes near Khartoum, Sudan, and an evaluation of the efficacy of chemical and mechanical barriers. Fr

Discusses use of copper sulfate as a molluscicide.

- Hoffman, G. L.** (1962) F  
8-10476  
*Fish. Leaflet, Wash.*, (508) : 3 p.

Whirling disease of trout

NE 62-06134.

- Liem, K. F.** (1963)\* F  
8-10477  
*Illinois biol. Monogr.*, (30) : 149 p.

The comparative osteology and phylogeny of the Anabantoidei (Teleostei, Pisces)

- Uchihashi, K., H. Shinamura & A. Honda** (1962) F  
8-10478  
*Bull. Japan Sea Fish. Res. Lab.*, (10) : 75-81

(An experimental study on the sleeping of fish (gold fish) ). Ni En

A conditioned reflex was established under various light conditions and was used to determine the time at which this sp. (*Carassius auratus*) sleeps, and the depth and nature of the sleep.

- Oh, Y.** (1962) F  
8-10479  
*Jap. J. Zool.*, 13 (2) : 383-93

Immuno-electrophoretic analysis of water-soluble proteins of fish egg

Study of water-soluble proteins of ripe unfertilized eggs and of the yolk sac of the third day embryos of an oviparous cyprinodont, the medaka (*Oryzias latipes*), by means of agar electrophoresis.

- Kobayashi, T.** (1959) F  
8-10480  
*Sci. Rep. Hokkaido Salm. Hatch.*, (14) : 1-4

(Application of biological stain for fish study. 1. Effectiveness of biological stain for the study of scale in rainbow trout by injection). Ni En

Experiments with alizarin red S and lead acetate injected into body muscle of rainbow trout with the objective of causing a mark on the scale at the time of injection.

- Bauer, O. N.** (1962)\* F  
8-10481  
PL-480 Int. : 8 p.

Development of parasitofauna in fishes of new water reservoirs

En 1954, Bauer, O. N. Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

- Hikita, T. et al.** (1959) F  
8-10482  
*Sci. Rep. Hokkaido Salm. Hatch.*, (14) : 91-121  
 (Some biological observations on the rainbow trout, *Salmo gairdneri irideus*, in the Nishibetsu River, with special reference to the consumption of salmon eggs and fry by predaceous fishes). *Ni En*

Identification of spp. preying on salmon eggs and fry with examination of feeding rates and habits of these spp. Fishing exploitation of these spp. is also examined.

- Tokui, T.** (1959) F  
8-10483  
*Sci. Rep. Hokkaido Salm. Hatch.*, (14) : 169-92  
 (Studies on the kokanee salmon in lake Towada, northern Honshu, Japan. 2. Climatic and hydrologic factors). *Ni En*

Examination of behaviour of the sp. in relation of temperature, precipitation and other climatic features. *Co* 8-11248.

- Miyamori, H.** (1962) F  
8-10484  
*Zool. Mag., Tokyo*, 71 (6) : 191-5  
 (Study on the estrogen-induced feminization in male gonads of teleost, *Lebistes reticulatus*). *Ni En*

Morphological and histological evidence of changes induced by treatment with ethinylestradiol and a diet containing the same substance.

- Jozuka, K., K. Jozuka & K. Mashiko** (1962) F  
8-10485  
*Zool. Mag., Tokyo*, 71 (8) : 269-73  
 (Accumulation of  $^{45}\text{Ca}$  by the regenerating fish scale). *Ni En*

Observations on *Carassius auratus* from which scales were removed and which were placed in dilute seawater containing  $^{45}\text{Ca}$ .

- Sreenivasan, A.** (1962) F  
8-10486  
*Progr. Fish Cult.*, 24 (4) : 181  
 Use of endrin in fishery management

Use of toxicant to remove undesirable fish (*Gambusia affinis*) from Ooty Lake, India, which permitted carp (*Cyprinus carpio*) to spawn. Also gives 24-hour lethal dosage for several species of Indian fishes (*Tilapia*, *Channa*, *Rasbora*, *Danio*, *Barbus*).

- Post, G.** (1962) F  
8-10487  
*Progr. Fish Cult.*, 24 (4) : 182-4  
 Furazolidone (nf-180) for control of furunculosis in trout

Recommends dosage of 25 milligrams per kilogram of fish per day for a minimum of 20 days for control of furunculosis.

# AQUATIC STOCKS

- F  
8-10488
- Bullock, G. L.** (1962)  
*Progr. Fish Cult.*, 24 (4) : 184  
 A new medium for isolation and presumptive identification of *Aeromonas salmonicida*

Describes test using Furunculosis Agar for isolation and presumptive identification of *Aeromonas salmonicida*.

- F  
8-10489
- Mairs, D. F. & T. E. Kennedy** (1962)  
*Progr. Fish Cult.*, 24 (4) : 188-9  
 Evaluation of some heparinized capillaries for microhematocrit determinations of warm-water fishes

Data points out necessity of adequate testing for clot-free samples before there is any attempt to determine "normal" microhematocrit values.

- F  
8-10490
- Anderson, G. A.** (1962)  
*Progr. Fish Cult.*, 24 (4) : 190-2  
 Three portable feeders for metering chemical into streams for control of sea lamprey

Describes gravity, fuel pump and electric pump feeders for metering out controlled concentrations of chemical solutions.

- F  
8-10491
- Ingalls, T. H. & U. Murakami** (1962)\*  
*Arch. Environ. Health*, 5 : 114-21  
 Cyclopia, ectromelia, and other monstrosities in zebra fish

- F  
8-10492
- Qadri, S. S.** (1962)\*  
*J. Protozool.*, 9 : 254-8  
 An experimental study of the life cycle of *Trypanosoma danilewskyi* in the leech, *Hemiclepsis marginata*

- F  
8-10493
- Karbaat, J. et al.** (1962)\*  
*Ned. milit. geneesk. Arch.*, 15 : 33-43  
 (Wounds caused by piranha (*Serrasalmus rhombeus* L.)). Ne

- F  
8-10494
- Fox, H.** (1961)\*  
*Acta anat.*, 47 : 156-63  
 The segmentation of components in the hind region of the head of *Neoceratodus* and their relation to the pronephric tubules

- F  
8-10495
- Stolk, A.** (1962)\*  
*Proc. K. ned. Akad. Wet. (C)*, 65 : 92-116  
 Enzymatic activity (oxidase and three dehydrogenase systems) of the oval cells with club-shaped inclusions in the connective tissue of the cichlid *Pterophyllum scalare* Cuvier. 1.

- F  
8-10496
- Khalil, L. F. (1961)\***  
*J. Helminth.*, 35 : 259-62  
 On a new trematode, *Orientocreadium lazeri* n. sp. from a freshwater fish, *Clarias lazera*, in the Sudan
- F  
8-10497
- Khalil, L. F. (1961)\***  
*J. Helminth.*, 35 : 263-8  
 On a new nematode, *Raphidascaroides bishavii* n. sp. from a freshwater fish, *Gymnarchus niloticus*, in the Sudan
- F  
8-10498
- Vinson, S. B., C. E. Boyd & D. E. Ferguson (1963)**  
*Science*, 139 (3551) : 217-8  
 Resistance to DDT in the mosquito fish, *Gambusia affinis*
- Reports that mosquito fish from waters near cotton fields that have had a long history of treatment with chlorinated hydrocarbon pesticides exhibited a marked resistance to DDT compared with fish from areas which had had no past exposure to insecticides.
- F  
8-10499
- Loshak, Ala (1962)\***  
*Gig. i Sanit.*, 27 : 93-5  
 (On hygienic evaluation of the accumulations of radioactive iodine by freshwater fish (year-old carp) ). *Ru*
- F  
8-10500
- Kik, M. C. (1962)\***  
*J. Amer. diet. Ass.*, 41 : 119-23  
 Nutritive value of buffalo fish
- F  
8-10501
- Frank, W. (1962)\***  
*Z. Parasitenk.*, 21 : 446-56  
 (Histological studies on *Carassius carassius auratus* L. (Pisces, Teleostei) after severe infection with *Trichodina domerguei* Wallengreen, 1897 (Protozoa, Euciliata) ). *De*
- F  
8-10502
- Qadri, S. S. (1962)\***  
*Z. Parasitenk.*, 21 : 517-20  
 New Myxosporidia from Indian freshwater fish, *Labeo fimbriatus*. 2. *Thelohanellus andhrae* n. sp.  
 Co 8-02495.
- F  
8-10503
- Boudreau, J. C. (1962)\***  
*Jap. J. Physiol.*, 12 : 272-8  
 Electrical activity in the olfactory tract of the catfish



- F  
8-10504
- Hisaoka, K. K. & C. F. Firlit (1962)\***  
*Amer. J. Anat.*, 110 : 203-15

The localization of nucleic acids during oogenesis in the zebrafish

- F  
8-10505
- Robertson, O. H. & B. C. Wexler (1962)**  
*J. Morph.*, 110 : 157-69

Histological changes in the pituitary gland of the rainbow trout (*Salmo gairdneri*) accompanying sexual maturation and spawning

A study has been made of the histological changes occurring in the pituitary gland of rainbow trout, including both migratory and non-migratory forms, during their complete sexual cycle.

- F  
8-10506
- Weinberg, A. G. & H. K. Hellerstein (1962)**  
*Proc. Soc. exp. Biol., N.Y.*, 110 : 255-8

Electrocardiographic observations on the heart of the guppy (*Lebistes reticulatus*)

In the pursuit of a simple laboratory bioassay procedure for cardiac glycosides, the authors have characterized the electrocardiogram and vectorcardiogram of the common guppy *Lebistes reticulatus*, and the electrocardiographic changes produced in this animal by digitalis glycosides.

- F  
8-10507
- Bentley, P. J. & B. K. Follett (1962)\***  
*Gen. comp. Endocr.*, 2 : 329-35

The action of neurohypophysial and adrenocortical hormones on sodium balance in the cyclostome, *Lampetra fluviatilis*

- F  
8-10508
- Godet, R. (1962)\***  
*C.R. Soc. Biol., Paris*, 156 : 148-50

(Development of the hypophysial pars intermedia in the Protopteridae during dehydration experiments). *Fr*

- F  
8-10509
- Peyraud, C. & A. Serfaty (1962)\***  
*J. Physiol. Path. gén.*, 54 : 396-7

(Influence of oxygenation of the environment on the respiratory rhythm of a fresh water teleost : the carp). *Fr*

- FG  
8-10510
- Behrend, E. R. & M. E. Bitterman (1962)**  
*Science*, 127 (3533) : 921-2

Probability learning

Two experiments reported in 1958 yielded close approximations to matching in *Tilapia macrocephala* (the African mouthbreeder), despite use of forced correction.

**Weatherley, A. H.** (1963)

FG

*Nature, Lond.*, 197 (4862) : 14-7

8-1051F

Notions of niche and competition among animals, with special reference to freshwater fish

Ci 1928 Elton, C., 1954 Andrewartha, H. G. & L. C. Birch, 1955 Dice, L. R., 583430, 585666, 59-2889, 59-6130 and 8-02564. Defines and discusses these terms, with special reference to morphology of gut of freshwater fishes, and their diet. Reviews the meanings attributed by other authors.

## FISHING

**Anderson, A. A.** (1960)\*

M

[Corpus Christi, Tex.], 49 p.

8-10512

Marine resources of the Corpus Christi area

**Bird, E. A.** (1960)\*

M

New York, Barnes, 111 p.

8-10513

Fishing off Puerto Rico

**Sangiorgio, A. B.** (1959)\*

M

Buenos Aires, Dirección General de Pesca, 45 p.

8-10514

La pesca marítima en el país (Sea fisheries in Argentina)

**Palenichko, Z. G. & V. M. Nadezhin** (Ed.) (1959)\*

M

Leningrad, Izd-vo Akademii nauk SSSR

8-10515

Atlas nauchnykh osnov rybopromyslovoi karty Onezhskogo zaliva Belogo moria (Atlas of the scientific basis of the fisheries chart of Onezhskaya Guba in the White Sea)

**Bezumov, K. I.** (1960)\*

M

Magadanskoe knizhnoe izd-vo, 62 p.

8-10516

Bogatstva Okhotskogo moria (The riches of the Okhotsk Sea)

**Shimma, Y. & H. Taguchi** (1961)

M

*J. Fd Hyg. Soc. Japan*, 2 (1) : 28-34

8-10517

A symptomatic observation of the intoxication caused by liver of "Ishinagi" (*Stereolepsis ishinagi*). Ni En

Issued also as: *Coll. Repr. Tokai Fish. Res. Lab.*, 1961 (B-363).

**Silk, M. H. & A. J. DeKoning** (1964)

M

*J. Amer. Oil Chem. Soc.*, 41 (9) : 619-22

8-10518

Phospholipids of the South African pilchard (*Sardina ocellata* Jenyns)

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**Möller, H. (1959)\*** M  
8-10519  
Marburg/Lahn, Institut für Genossenschaftswesen an der Philipps-Universität  
Marburg (Lahn), 200 p.

Fischereigenossenschaftswesen und Fischwirtschaft in Deutschland und  
anderen europäischen Fischereiländern (Fishery cooperatives and fisheries  
in Germany and other European countries)

**Voinikanis-Mirskii, V. N. (1961)\*** M  
8-10520  
Moskva, Pishchepromizdat: 501 p.

Tekhnika promyshlennogo rybolovstva i promysel morskogo zveria  
(Technique of industrial fisheries and the fishing of sea animals)

2nd revised edition.

**FAO (1962)** M  
8-10521  
*Rep. FAO/EPTA, (1565) : 17 p.*

Report to the government of the Philippines on freshwater fisheries investi-  
gations based on the work of J. W. Parsons, FAO/TA inland fisheries biologist

Report on FAO project carried out under UN Expanded Program of  
Technical Assistance. Includes recommendations for continued research  
and investigation of fisheries on Laguna de Bay.

**Hallgrímsson, I. (1961)\*** M  
8-10522  
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Studies on the temperature and salinity resistance of *Tigriopus japonicus*. 3. Influence of the environmental oxygen concentration on the heat resistance of *Tigriopus japonicus*

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*Seiro, Seitai*, 10 (2) : 63-7

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Lowestoft, Fisheries Laboratory, mimeo, 25 p.

The cultivation of marine planktonic diatoms and dinoflagellates

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 BA 38A (2) 4916.



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*Trud. zool. Inst. Akad. Nauk SSSR*, 26 : 427-38

Nabliudeniia na dafnievykh basseinakh rybtsovo-shemainogo pitomnika  
(Observations on the *Daphnia* tanks of the vimba-shemaya nursery)

BA 38A (2) 4919.

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*Referat. Zh. (Biol.) (En Transl.)*, 8D670

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*Int. Rev. Hydrobiol.*, 46 (1) : 115-29

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BA 38A (2) 4925.

**Ulomskii, S. N.** (1960) F  
8-11094  
*Trud. vsesoiuz. gidrobiol. Obshch.*, 10 : 136-57

O sezonnykh izmeneniiakh chislennosti i biomassy organismov v vodoemakh Urala (na primere Verkh-Isetskogo pruda g. Sverdlovsk) (The seasonal changes in the number and biomass of organisms in the reservoirs of the Urals (with the example of the Upper Iset pond in Sverdlovsk) )

BA 38A (2) 4926.

**Ulomskii, S. N.** (1961)\* F  
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8-11096  
*Trud. vsesoiuz. gidrobiol. Obshch.*, 10 : 36-42

O vertikal'nom raspredelenii zooplanktona v Rybinskom vodokhranilishe (The vertical distribution of the zooplankton in the Rybinsk Reservoir)

BA 38A (2) 4927.

**Voronina, N. M.** (?)\* F  
8-11097  
*Referat. Zh. (Biol.) (En Transl.)*, 11D647

The vertical distribution of the zooplankton in the Rybinsk Reservoir

*En* 8-11096.

**Walter, G. & R. Scharf** (1961)F  
8-11098*Int. Rev. Hydrobiol.*, 46 (1) : 130-61

Das biologische Gütebild der unteren Oder und der Lausitzer Neisse (The biological quality picture of the lower Oder River and of the Lausitzer Neisse River)

BA 38A (2) 4928.

**Wegelin, R.** (1961)F  
8-11099*Int. Rev. Hydrobiol.*, 46 (1) : 162-73

Über zwei eucavale Crustaceen aus dem interstitiellen Grundwasser der Leipziger Umgebung (On two eucaval crustaceans from the interstitial ground water of the Leipzig region)

BA 38A (2) 4929.

**Hepher, B.** (1962)F  
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Primary production in fishponds and its application to fertilization experiments

BA 39A (5) 17697.

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8-11101*Schweiz. Z. Hydrol.*, 23 (2) : 462-93

Le plancton du lac Léman (Inventaire) (The plankton of the lake of Geneva (inventory))

BA 39A (5) 17705.

**Pejler, B.** (1961)F  
8-11102*Oikos*, 12 (2) : 225-48

The zooplankton of Ösbysjön, Djursholm. 1. Seasonal and vertical distribution of the species

Account of the species of Rhizopoda, Ciliata, Rotatoria, Cladocera, Copepoda, Acarina. Discusses some general features of the seasonal and vertical distribution of the zooplankters, species composition of the zooplankton and animal remains in the deeper layers of the bottom sediment.

**Reed, E. B.** (1962)F  
8-11103*Arctic*, 15 (1) : 27-50

Freshwater plankton Crustacea of the Colville River area, northern Alaska

BA 39A (5) 17709.

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*Oikos*, 12 (2) : 195-224

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 8-11104

The phytoplankton of Ösbysjön, Djursholm. 2. Ecological aspects  
 Co 62-01874. Discusses phytoplankton development, winter conditions  
 and spring outburst, oxygen conditions and their influence on phytoplankton  
 composition, mud organisms, scarcity of diatoms and dominance of Chryso-  
 phyceae.

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*Mem. Ist. ital. Idriobol. de Marchi*, 13 : 151-77

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BA 39A (5) 17684.

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**Sankarankutty, C.** (1961)  
*J. Mar. biol. Ass. India*, 3 (1/2) : 96-100

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On the porcellanid crab, *Porcellanella triloba* White (Crustacea-Anomura),  
 a commensal on sea pens; with remarks on allied species. 1

Ill. description.

**Sankarankutty, C.** (1961)  
*J. Mar. biol. Ass. India*, 3 (1/2) : 92-5

M  
 8-11107

On a new genus of Porcellanidae (Crustacea-Anomura)

Ill. description.

**Sankolli, K. N.** (1961)  
*J. Mar. biol. Ass. India*, 3 (1/2) : 87-91

M  
 8-11108

On the early larval stages of two leucosiid crabs, *Philyra corallicola* Alcock  
 and *Arcania septemspinosa* (Fabricius)

Ill. description.

**Ummerkutty, A. N. P.** (1961)  
*J. Mar. biol. Ass. India*, 3 (1/2) : 19-69

M  
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Studies on Indian copepods. 5. On eleven new species of marine cyclopoid  
 copepods from the south-east coast of India

Ill. morphological description of these spp. CR 62-01845.

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Systematic review of Indo-Pacific spp. of Didemnidae and their relations, with comprehensive keys to their identification and distribution. Descriptions of 34 spp. taken from Australian waters; of these, 8 spp. are new to science, and include a new genus containing two spp. Larvae are available and described for most spp. for the first time. CR 9-01192.

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Notes on breeding habits, ill. description of the spawn, the eggs and the veliger shells.

**Wright, R.** (1963)

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8-11112

*S. Pacif. Bull.*, 13 (1) : 24-7

Cone shells can be killers

Popular account of poisoning and other effects caused by various species of cones with brief description of six of the most lethal of these molluscs.

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*Zool. Mag., Tokyo*, 70 (12) : 429

(Notes on the chromosome number of *Mitella mitella*). Ni En

Chromosome number.

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8-11114

*Zool. Mag., Tokyo*, 70 (12) : 425-8

(Notes on the chromosomes of two species of echinoderms, *Hemicentrotus pulcherrimus* (A. Agassiz) and *Anthocidaris crassispina* (A. Agassiz)). Ni En

Chromosome number, and behaviour of chromosomes during meiotic divisions.

**Squires, D. F.** (1960)

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*Rec. Auckland (N.Z.) Mus.*, 5 (3/4) : 195-201

Scleractinian corals from the Norfolk Island cable

Notes on the growth rates of some of these corals and morphological notes on five spp.



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8-11116  
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 Antaretic and subantaretic Mollusca

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 Notes on some marine algae from Vietnam. 1.

Ill. description of 10 spp. of which 6 are new, and one is a new variety.

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Field studies to test the hypothesis that the shell complexion of abalone, being determined by food supply, may serve as index of the suitability of a location as culture site. Co 8-11120.

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Observation on abalone fed various diets of algae; optimum temperature for growth; efficiency of food conservation; necessary feeding rates; relation between kind of food available and gonad maturation; effect of diet on proximate composition.

- Nagao, Z.** (1962) M  
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Co 8-11209.

M  
8-11211

**Anon.** (1961)  
*Tuna Fish.*, (79) : 1-6  
 (Fishing and sea condition of tuna fishing ground in Mar. in 1960. (By the data collected from the 198 appointed boats) ). *Ni*

Co 8-11212.

M  
8-11212

**Anon.** (1961)  
*Tuna Fish.*, (78) : 1-9  
 (Fishing and sea condition of tuna fishing ground in Mar. in 1960. (By the data collected from the 329 appointed boats) ). *Ni*

Co 8-11213.

M  
8-11213

**Anon.** (1961)  
*Tuna Fish.*, (77) : 1-9  
 (Fishing and sea condition of tuna fishing ground in Mar. in 1960. (By the data collected from the 347 appointed boats) ). *Ni*

Co 8-11214.

M  
8-11214

**Anon.** (1961)  
*Tuna Fish.*, (75) : 1-10  
 (Fishing and sea condition of tuna fishing ground in Feb. in 1960. (By the data collected from the 362 appointed boats) ). *Ni*

CR 8-11213.

M  
8-11215

**Schewill, W. E.** (1962)  
*Oceanus*, 9 (2) : 3-13  
 Whale music

Photographs of whales and porpoises and semi-popular account of research carried out at sea in listening to and recording sounds made by these animals.

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*Fish. Newslett. Aust.*, 22 (2) : 21-5  
Australian whaling since war
- Brief notes on establishment of the industry, its management and production.
- M  
8-11217
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*Fish. Newslett. Aust.*, 21 (3) : 15  
The tuna season in New South Wales
- A fisherman's account of the events of the 1961/62 season.
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8-11218
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*Fish. Newslett. Aust.*, 21 (5) : 15  
South-west survey report
- Cruises made by F.V. 'Estelle Star' under charter to carry out prospecting fishing south-west of Australia for tuna.
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- Salvatore, G. et al.** (1959)  
*C.R. Soc. Biol., Paris*, 153 : 1686-92  
Fonction thyroïdienne et métabolisme de l'iode chez la larve d'un cyclostome (*Petromyzon planeri* Bl.) (Thyroid function and iodine metabolism in the larva of a cyclostome, *Petromyzon planeri*, Bl.)
- NAR 30 (4) 6260.
- M  
8-11220
- Salvatore, G. et al.** (1959)  
*C.R. Soc. Biol., Paris*, 153 : 1693-7  
Sur le transport de la thyroxine par les protéines du sérum de l'ammocoete *Petromyzon planeri* Bl. (The transport of thyroxine by serum proteins of the ammocoete *Petromyzon planeri*, Bl.)
- NAR 30 (4) 6261.
- M  
8-11221
- Caldwell, M. C., R. M. Haugen & D. K. Caldwell** (1962)  
*Science*, 138 (3543) : 907-8  
High-energy sound associated with fright in the dolphin
- Sound produced by *Tursiops truncatus* described and illustrated. Similar sound may be basis of long-distance alarm signal reported in other cetaceans.
- M  
8-11222
- Gunter, G.** (1961)  
*Copeia*, 1961 (2) : 234-5  
Salinity and size in marine fishes
- BA 37A (4) 12682.



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- Beklemishev, K. V. & N. V. Parin** (1960) M  
8-11223  
*Trud. Inst. Okeanol.*, 41 : 257-65

Biogeograficheskie granitsy v pelagiali severnoi chasti Tikhogo okeana zimoi 1958/59 g. (Biogeographic boundaries of the pelagial of the northern part of the Pacific Ocean in the winter of 1958/59)

BA 38A (2) 4878. The work is based on collections from 29 voyages of the 'Vityaz' in October-March 1959, northward from N lat. 20°.

- Beklemishev, K. V. & N. V. Parin** (1961)\* M  
8-11224  
*Referat. Zh. (Biol.) (En Transl.)*, 18D495

Biogeographic boundaries of the pelagial of the northern part of the Pacific Ocean in the winter of 1958/59

*En* 8-11223.

- Stevenson, R. E.** (1959) M  
8-11225  
*Publ. Calif. Wat. Poll. Contr. Bd.*, 20 : 1-58  
The marine climate of southern California

BA 38A (2) 4899.

- Ingle, R. M., R. F. Hutton & R. W. Topp** (1962) M  
8-11226  
*Tech. Ser. Fla Bd Conserv.*, (38) : 57 p.  
Results of the tagging of salt water fishes in Florida

Fishing contest of large proportions and subsidized by private funds furnished opportunity for making large-scale tagging and recovery studies. Information obtained on growth, migrations, efficacy of specific types of tags on several previously untagged animals, comparative fishing pressures in different areas, and, information on costs of conducting large scale study. Main spp. tagged were: *Cynoscion nebulosus* (Cuvier), *Sciaenops ocellata* (Linnaeus), *Archosargus probatocephalus* (Walbaum), *Mugil cephalus* Linn., *Lutianus griseus* Linn., *Sphyræna barracuda* (Shaw), *Archosargus probatocephalus* (Walbaum).

- Davis, H. C.** (1961) M  
8-11227  
*Comm. Fish. Rev.*, 23 (12) : 8-23

Effects of some pesticides on eggs and larvae of oysters (*Crassostrea virginica*) and clams (*Venus mercenaria*)

BA 38A (2) 4947.

- Paulik, G. J.** (1962) M  
8-11228  
*Trans. Amer. Fish. Soc.*, 91 (1) : 95-8

Use of the Chapman-Robson survival estimate for single and multi-release tagging experiments

BA 38A (2) 4978.

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**Pinto, J. Dos Santos & I. F. Barraca** (1958)

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8-11229

*Notas. Estud., Inst. Biól. marit.*, 19 : 1-58

Aspects biologiques et biométriques de la sardine, (*Sardina pilchardus* Walb.) des environs de Lisbonne, pendant les années 1952-1957 (Biological and biometrical aspects of the sardine (*Sardina pilchardus* Walb.) in the environs of Lisbon during the years 1952-1957)

BA 38A (2) 4979.

**Beverton, R. J. H. & V. M. Hodder** (Ed.) (1962)

M  
8-11230

*Annu. Proc. int. Comm. Northw. Atlant. Fish.*, 11, Suppl. : 81 p.

Report of working group of scientists on fishery assessment in relation to regulation problems

Do 60-242me. Gives, for N.W. Atlantic assessments of probable effects of changes in trawl mesh size on catches of cod, haddock, redfish, American plaice, and other spp., by sub-area; effects of change in effort; other methods of regulation; considers consequences of uniform mesh regulations; recommendations for future work; list of basic data, much unpublished, deposited with ICNAF Secretariat and on which assessments were based. Several summary tables, figure and graphs are given, with bibliography of references to sources of published data used. Applies method described in; Gulland, J. A. (1961). Ci 62-01518.

**Beklemishev, K. V. & F. A. Pasternak** (1961)\*

M  
8-11231

*Referat. Zh. (Biol.) (En Transl.)*, 23D519

A quantitative calculation of flying fish in the Atlantic and the problem of estimating the productivity of tropical waters

En 8-11230.

**Chilingar, G. V.** (1962)

M  
8-11232

*Bull. S. Calif. Acad. Sci.*, 61 (1) : 45-60

Dependence on temperature of Ca/Mg ratio of skeletal structures of organisms and direct chemical precipitates out of sea water

BA 39A (5) 17633.

**Sindermann, C. J. & A. E. Farrin** (1962)

M  
8-11233

*Ecology*, 43 (1) : 69-75

Ecological studies of *Cryptocotyle lingua* (Trematoda: Heterophyidae) whose larvae cause "pigment spots" of marine fish

BA 39A (5) 17753. Part of a continuing study of the role of disease in the sea.

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- Tagatz, M. E. & D. L. Dudley (1961)** M  
8-11234  
*Spec. sci. Rep. U.S. Fish Wildl. Serv.—Fish*, (390) : 1-19  
 Seasonal occurrence of marine fishes in four shore habitats near Beaufort, N.C., 1957-60

Monthly frequency of occurrence and size range determined by 3-year seining programme.

- Gundersen, K. R. (1962)** M  
8-11235  
*Fiskets Gang*, 1962 : 439-44  
 Undersøkelser av krabbe (*Cancer pagurus* L.) i farvannene ved Bergen i årene 1959-60 (Investigations of the crab (*Cancer pagurus* L.) in the waters near Bergen in the years 1959-60). No

- Badamshin, B. I. (1961)** M  
8-11236  
*Trud. Soveshch. Ikhtiol. Kom.*, 12 : 170-9  
 Zapasy kaspiskogo tiulenia i puti ikh rational'nogo ispol'zovaniia (Caspian seal stocks and methods for their rational exploitation)

BA 39E (6) 21795.

- Badamshin, B. I. (1962)\*** M  
8-11237  
*Referat. Zh. (Biol.) (En Transl.)*, 41278  
 Caspian seal stocks and methods for their rational exploitation  
*En* 8-11236.

- Smith, J. L. B. (1963)** M  
8-11238  
*Ichthyol. Bull.*, (27) : 515-43  
 Fishes of the family Syngnathidae from the Red Sea and the western Indian Ocean

Description of family; description and key to identification of genera and spp.

- Bel'kovich, V. M. & A. V. Yablokov (1962)\*** M  
8-11239  
*Referat. Zh. (Biol.) (En Transl.)*, 41273  
 Among the walruses  
*En* 8-11238.

- M  
8-11240
- Chestnoi, V. N.** (1961)  
*Ryb. Khoz.*, 6 : 53-8

Vertikal'nye migratsii sel'di i metody ispol'zovaniia ikh v praktike lova  
(Vertical migrations of the herring and methods of utilizing them in fishing)

BA 39E (6) 21800. The depth of submersion of the herring during its diurnal vertical migrations is connected with the pattern of diurnal illumination — isophotic illumination, which is dependent on the time of year, the transparency of the sea, and cloudiness.

- M  
8-11241
- Chestnoi, V. N.** (1962)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 4I51

Vertical migrations of the herring and methods of utilizing them in fishing

*En* 8-11240.

- M  
8-11242
- Dorofeev, S. V.** (1961)\*  
*Trud. Soveshch. ikhtiolog. Kom.*, 12 : 164-9

Sovetskie issledovaniia morskikh kotikov v severnoi chasti Tikhogo okeana  
(Soviet studies on fur seals in the northern part of the Pacific Ocean)

BA 39E (6) 21802. Preliminary results of projects in 1957-1959 are reported.

- M  
8-11243
- Dorofeev, S. V.** (1962)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 41272

Soviet studies on fur seals in the northern part of the Pacific Ocean

*En* 8-11242.

- M  
8-11244
- Fuks, V. R.** (1960)  
*Izv. tikhookean. nauch.-issled. Inst. ryb. Khoz.*, 46 : 189-96

Vlianie vnutrennikh prilivnykh voln na sutochnye vertikal'nye migratsii morskikh promyslovnykh ryb (The effect of internal tidal waves on the daily vertical migration of commercial fish)

BA 39E (6) 21803.

- M  
8-11245
- Fuks, V. R.** (1962)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 2I43

The effect of internal tidal waves on the daily vertical migration of commercial fish

*En* 8-11244.



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**Khuzin, R. Sh.** (1961) M  
8-11246  
*Trud. Soveshch. ikhtiolog. Kom.*, 12 : 133-7

Prospekty razvitiia promysla belukhi na evropeiskom Severe (Prospects for the development of the white whale industry in the European north)

BA 39E (6) 21808.

**Khuzin, R. Sh.** (1962)\* M  
8-11247  
*Referat. Zh. (Biol.) (En Transl.)*, 41279

Prospects for the development of the white whale industry in the European north

En 8-11246.

**Tokui, T.** (1959) MF  
8-11248  
*Sci. Rep. Hokkaido Salm. Hatch.*, (13) : 35-44  
(Studies on the kokanee salmon in lake Towada, northern Honshu, Japan (1)). Ni En

Data on length and weight of free-swimming fry released from the Towada hatchery: length and weight of spawners and number of eggs produced.

**Nishida, H.** (1959) MF  
8-11249  
*Sci. Rep. Hokkaido Salm. Hatch.*, (13) : 29-34  
(A preliminary report on the relation of blastoderm and vacuoles secreting ketoenol substance in the course of salmon development). Ni En

Preliminary report on the morphological nature of the blastoderm and of the vacuoles secreting ketoenol substance during the early development of the egg of *Oncorhynchus keta*.

**Sakano, E.** (1959) MF  
8-11250  
*Sci. Rep. Hokkaido Salm. Hatch.*, (13) : 23-7  
(Estimation and its accuracy of the number of eggs and fry of chum salmon in artificial hatching). Ni En

Report on the use of sampling technique for this estimation.

**Okubo, S.** (1959) MF  
8-11251  
*Sci. Rep. Hokkaido Salm. Hatch.*, (13) : 11-22  
(Some knowledge on the growth and conditions of gonad of pink salmon in the north Pacific Ocean). Ni

**Kobayashi, T. (1959)**MF  
8-11252*Sci. Rep. Hokkaido Salm. Hatch.*, (13) : 1-10(Age determination of chum salmon in the northern Pacific Ocean during the early parts of fishing season). *Ni En*

Examination of the difficulty in reading scales presented by the fact that the resting of winter zone in the scale may not be formed exclusively in winter.

**Kuroda, N. (1962)**MF  
8-11253*Jap. J. Ichthyol.*, 8 (5/6) : 115-21(On the life colors of some fishes. 12). *Ni En*

Species of the families Eleotridae and Gobiidae found in Suruga Bay and Kyushu, Japan. Co 61-13334, Ci 585746, Ci 59-8974, Ci 60-8753, Ci 61-13333.

**Kuroda, N. (1962)**MF  
8-11254*Jap. J. Ichthyol.*, 8 (5/6) : 122-5(On the life colors of some fishes. 13). *Ni En*

Deals with a further 11 species from Suruga Bay and Shinhamma (Chiba Prefecture Japan). Co 8-11253.

**Kondo, K. & M. Kitahara (1962)**MF  
8-11255*Bull. Tokai Fish. Res. Lab.*, (33) : 1-10(A note on scales of the chum salmon and allied species). *Ni En*Scale characters of *Oncorhynchus keta* (Walbaum) compared with those of *O. nerka* (Walbaum), *O. gorbuscha* (Walbaum), *O. kisutch* (Walbaum) and *O. tshawytscha* (Walbaum) with respect to size, shape and relative width of winter zones.**Idler, D. R., P. J. Schmidt & A. P. Ronald (1962)**MF  
8-11256*Canad. J. Biochem. Physiol.*, 40 (5) : 549-53Isolation of 20 $\beta$ -dihydrocortisone from sockeye salmon (*Oncorhynchus nerka*) plasma**Tarr, H. L. A & M. Leroux (1962)**MF  
8-11257*Canad. J. Biochem. Physiol.*, 40 (5) : 571-89

Acid-soluble phosphorous compounds and free sugars in fish muscle and their origin

The distribution of nucleotides and sugar phosphates as studied in muscles of several species of fish.

- Sakano, E. & I. Miura** (1959) MF 8-11258  
*Sci. Rep. Hokkaido Salm. Hatch.*, (13) : 49-50  
 (Marking experiments of young salmon in Hokkaido. 4. Results observed in 1957). Ni

CR 61-04704.

- Hikita, T. & S. Taniguchi** (1959) MF 8-11259  
*Sci. Rep. Hokkaido Salm. Hatch.*, (13) : 45-8  
 (A list of fishes known to inhabit in Towada Lake, northern Honshiu, Japan). Ni En

- Noseda, V. & F. Chiesa** (1963) MF 8-11260  
*Nature, Lond.*, 197 (4869) : 816-8  
 Vectorcardiogram of *Anguilla anguilla* L. and *Pleurodeles waltlii* Mich.

- Svetovidov, A. N. & S. S. Shul'man** (1960) MF 8-11261  
*Zool. Zh.*, 39 (12) : 1866-70  
 Sviaz' sostava parazitofauny nekotorykh grupp ryb s parallelizmom v ikh ekologii i rasprostraneni (The relation of the composition of parasitic fauna of some groups of fishes and parallelism in their ecology and distribution). En

BA 37A (4) 12692. It was noted that in a given similarity a major role is played by ecological parallelism and close contact. Thus, systematically remote salmon (*Salmo*) and (*Lampetra*) have parasitic fauna of similar composition.

- Svetovidov, A. N. & S. S. Shul'man** (1961)\* MF 8-11262  
*Referat. Zh. (Biol.) (En Transl.)*, 17D481  
 The relation of the composition of parasitic fauna of some groups of fishes and parallelism in their ecology and distribution

En 8-11261.

- Bauer, O. N. & A. V. Uspenskaia** (1959) MF 8-11263  
*Trud. Soveshch., ikhtiol. Kom.*, 9 : 21-7  
 Novye lechebnye sredstva bor'by s zabolevaniiami ryb (New therapeutic agents in the control of fish diseases)

BA 38A (2) 4935.

- Bauer, O. N. & A. V. Uspenskaya** (1960)\* MF 8-11264  
*Referat. Zh. (Biol.) (En. Transl.)*, 10O139  
 New therapeutic agents in the control of fish diseases

En 8-11263.

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**Bauer, O. N. & Iu. A. Strelkov** (1959)

MF

8-11265

*Trud. Soveshch. ikhtiol. Kom.*, 9 : 86-90

Zabolevaniia molodi baltiiskogo lososia pri iskusstvennom vyrashchivanii  
(Diseases of young Baltic salmon under conditions of artificial rearing)

BA 38A (2) 4936.

**Bauer, O. N. & Yu. A. Strelkov** (1960)\*

MF

8-11266

*Referat. Zh. (Biol.) (En Transl.)*, 100143

Diseases of young Baltic salmon under conditions of artificial rearing

*En* 8-11265.

**Bryuzgin, V. L.** (1961)

MF

8-11267

*Vop. Ikhtiol.*, 17 : 140-9

(Lee's phenomenon). *Ru*

BA 38A (2) 4942. Lee's phenomenon may be either the consequence of natural changes in the composition of the adolescent portion of a population, or else a methodological error introduced in back calculation of growth from scales.

**Bryuzgin, V. L.** (1961)\*

MF

8-11268

*Referat. Zh. (Biol.) (En Transl.)*, 19D314

Lee's phenomenon

*En* 8-11267.

**Collins, G. B., J. R. Gauley & C. H. Elling** (1962)

MF

8-11269

*Trans. Amer. Fish. Soc.*, 91 (1) : 1-7

Ability of salmonids to ascend high fishways

BA 38A (2) 4945. Adult migrating chinook salmon (*Oncorhynchus tshawytscha*), sockeye salmon (*O. nerka*) and steelhead trout (*Salmo gairdneri*) were permitted to ascend experimental "endless" fishway structures in which poll-type fishways of any height could be simulated.

**Fray, D. H., Jr.** (1961)

MF

8-11270

*Bull. Pacif. Mar. Fish. Comm.*, 5 : 77-83

Some problems in the marking of salmonids

BA 38A (2) 4951.



- MF  
8-11271
- Lagler, K. F.** (1962)  
*Trans. Amer. Fish. Soc.*, 91 (1) : 90-3  
 The Dolly Varden, *Salvelinus malma*, and its predatory relationships to young salmon, *Oncorhynchus* spp., in an estuary of southeastern Alaska  
 BA 38A (2) 4961.
- MF  
8-11272
- Lyaiman, E. M.** (1959)  
*Trud. Soveshch. Ikhtiol. Kom.*, 9 : 18-20  
 Novye dannye po prizhiznennoi diagnostike zabolevanii ryb (New data on the diagnosis of fish diseases during life)  
 BA 38A (2) 4965.
- MF  
8-11273
- Lyaiman, E. M.** (1960)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 100138  
 New data on the diagnosis of fish diseases during life  
*En* 8-11272.
- MF  
8-11274
- Ricker, W. E.** (1962)  
*Trans. Amer. Fish. Soc.*, 91 (1) : 98-9  
 Connecticut River shad  
 BA 38A (2) 4982.
- MF  
8-11275
- Shishanina, A. D.** (1959)  
*Trud. Soveshch. Ikhtiol. Kom.*, 9 : 94-8  
 Materialy po etiologii i patogenezu belopiatnistoï bolezni lichinok lososevykh ryb (Data on the etiology and pathogenesis of white-spot disease of the fry of the Salmonidae)  
 BA 38A (2) 4987.
- MF  
8-11276
- Shishanina, A. D.** (1960)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 100144  
 Data on the etiology and pathogenesis of white-spot disease of the fry of the Salmonidae  
*En* 8-11275.
- MF  
8-11277
- Sumner, F. H.** (1962)  
*Trans. Amer. Fish. Soc.*, 91 (1) : 77-83  
 Migration and growth of the coastal cutthroat trout in Tillamook County, Oregon  
 BA 38A (2) 4993.

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**Warner, K.** (1962)

MF  
8-11278

*Trans. Amer. Fish. Soc.*, 91 (1) : 99-102

Contribution of hatchery-reared salmon to the fishery of the Fish River Lakes, Maine

BA 38A (2) 4997.

**Pearcy, W. G.** (1962)

MF  
8-11279

*Ecology*, 43 (2) : 248-59

Distribution and ecology of fishes of the Mystic River Estuary, Connecticut

BA 39A (5) 17663.

**Yablokov, A. V.** (1962)

M  
8-11280

*Priroda, Moskva*, 2 : 66-72

Sud'ba grenlandskogo tiulenya (The fate of the harp seal)

BA 39A (5) 17764.

**Parisot, T. J. & J. Pelnar** (1962)

MF  
8-11281

*Progr. Fish. Cult.*, 24 (2) : 51-5

An interim report on Sacramento River chinook disease: A virus-like disease of chinook salmon

BA 39A (5) 17747.

**Major, R. L. & D. R. Craddock** (1962)

MF  
8-11282

*Fish. Bull., U.S.*, 61 (194) : 429-37

Influence of early maturing females on reproductive potential of Columbia River blueback salmon (*Oncorhynchus nerka*)

A fecundity study in 1957-59 revealed that the average egg content of 1-year ocean females was approximately one-third less than that of 2-year-ocean females. The average egg content of 3-year-ocean females was, in turn, about one-fourth greater than that of 2-year-ocean females. Analysis of the age group fecundity and sex ratio data showed that the number of spawners or even females does not always accurately portray the reproductive potential of an escapement. Erroneous reproduction estimates seriously distort escapement-return relationships.

**Kerns, O. E., Jr.** (1961)

MF  
8-11283

*Fish. Bull., U.S.*, 61 (189) : 301-20

Abundance and age of Kvichak River red salmon smolts

BA 39E (6) 21807. Standardized methods are described for use of an index fyke net to determine annually the abundance of smolt migrations from the Kvichak River system, Bristol Bay, Alaska. Details of the fyke-net construction are presented.

**Kukiev, M. A. (1961)**MF  
8-11284*Ryb. Khoz.*, 6 : 35

Nerest ostrovykh v raione Dongosrybzapovednika (The spawning of sturgeon in the region of the Don state fish refuge)

BA 39E (6) 21813. In the stomachs of 16% of the *Blicca bjoerkna* examined in 1959, and of 8% in 1960, sturgeon eggs were discovered. They were also discovered in the stomachs of the sterlet (*Acipenser ruthenus*). Undigested eggs in various stages of development were found. It is assumed that the sterlet spawns in the lower reaches of the Don.

**Kukiev, M. A. (1962)\***MF  
8-11285*Referat. Zh. (Biol.) (En Transl.)*, 2128

The spawning of sturgeon in the region of the Don state fish refuge

*En* 8-11284.

**Tomoda, Y. (1962)**F  
8-11286*Jap. J. Ichthyol.*, 8 (5/6) : 126-46

(Studies of the fishes of lake Biwa-ko. 1. Morphological study of the three species of catfishes of the genus *Parasilurus* from lake Biwa-ko, with reference to their life). *Ni En*

Morphological features, including body proportions.

**Penczak, T. (1962)**F  
8-11287*Ann. zool., Warsz.*, 20 (17) : 335-41

Ciernik (*Gasterosteus aculeatus* L.) z Nowej Szkocji, Nowej Fundlandii i wyspy francuskiej Saint-Pierre (The stickleback (*Gasterosteus aculeatus* L.) from Nova Scotia, Newfoundland and the French Island Saint-Pierre). *En*

Comparisons, primarily morphometric, based on 46 specimens.

**Ogino, C. & S. Yasuda (1962)**F  
8-11288*Bull. Jap. Soc. sci. Fish.*, 28 (8) : 788-91

(Changes in inorganic constituents of developing rainbow trout eggs). *Ni En*

Changes in wet weight, water, dry matter and mineral content.

**Shiraishi, Y. & N. Suzuki (1962)**F  
8-11289*Bull. Freshw. Fish. Res. Lab., Tokyo*, 12 (1) : 83-107

(The spawning activity of ayu-fish, *Plecoglossus altivelis*). *Ni En*

Study of the spawning locality, the diurnal and seasonal reproductive habits and the effect of environmental conditions on the eggs produced.

- Ito, T.** (1962) F  
8-11290  
*Bull. Freshw. Fish. Res. Lab., Tokyo*, 12 (1) : 75-81

(Harvests of wild goldfish, common carp and freshwater shrimps, in relation to standing crop of netplankton and bottom fauna in farm ponds, Shioda Plain, Nagano Prefecture). *Ni En*

Estimation of standing crop of plankton and bottom fauna (serving as natural foodstuffs) in six farm ponds and calculation of the correlation between these estimates of crop and the fish harvest taken from the ponds. Equations are given for the harvest obtained from the food crops.

- Nakahara, K.** (1962) F  
8-11291  
*Mem. Fac. Fish. Kagoshima*, 11 (1) : 14-7

(On the spawning behaviour of a cardinal fish, *Apogon notatus* (Houttuyn). *Ni En*

Season and water temperature of spawning; courting and mating behaviour.

- Yamamoto, K.** (1962) F  
8-11292  
*Annot. zool. jap.*, 35 (3) : 156-61

Origin of the yearly crop of eggs in the medaka, *Oryzias latipes*

Histological examination of ovaries taken from females at monthly intervals through the year.

- Chaudry, H. S. & A. B. Das** (1962) F  
8-11293  
*Annot. zool. jap.*, 35 (1) : 20-2

Note on the occurrence of a fourth branchial branch of the vagus nerve in certain carps

III. morphological description.

- Arai, R. & N. Egami** (1961) F  
8-11294  
*Annot. zool. jap.*, 34 (4) : 185-92

Occurrence of leucophores on the caudal fin of the fish *Oryzias latipes*, following administration of androgenic steroids

Observations on a number of leucophores on the caudal fin of normal fish indicating sexual differences and variation through the breeding season. Similar observations on fish treated with testosterone and other steroids.

- Kiener, A.** (1962) F  
8-11295  
*Bull. Madagascar*, 12 (197) : 883-902

Perspectives et intérêts de la . . . rizipisciculture à Madagascar (Prospects and importance of . . . fish culture in rice fields in Madagascar)

TA (2) k939. In Madagascar this form of fishery (*Paratilapia polleni*) has been known for a long time. With introduction of a carp by 'Service des Eaux et Forêts' in 1926, the application of fish culture in rice fields has been extended to some 150 ha. Expansion to 10% of country's 900,000 ha of rice fields is feasible.



**Keiz, G.** (1959)F  
8-11296*Naturwissenschaften*, 46 : 610

Die Abhängigkeit des Rohfettgehaltes der Leber des Karpfens (*Cyprinus carpio*) L. von der Jahreszeit, der Ernährung und den Geschlecht sowie über die Beziehungen zum Gehalt an fettlöslichem Vitamin A (The dependence of the crude fat content of the liver of the carp (*Cyprinus carpio* L.) on season, feeding and sex and its relation to the content of fat-soluble vitamin A)

NAR 30 (3) 4422.

**Stolk, A.** (1959)F  
8-11297*Naturwissenschaften*, 46 : 409-10

High-fat diet and mast cell count in myocardium of some teleosts

NAR 30 (2) 2584. Healthy young male and female *Lebistes reticulatus* (Peters), *Xiphophorus helleri* (Heckel), and *Xiphophorus maculatus* (Günther) were kept in glass tanks with tap water. Given no food or algae or *Enchytraeus* or a low-fat diet or a high-fat diet with cholesterol.

**Stolk, A.** (1959)F  
8-11298*Naturwissenschaften*, 46 : 476-7

Leucine aminopeptidase activity in mesenterial mast cells of the carp

NAR 30 (2) 2585.

**Sukhoverkhov, F. M.** (1959)F  
8-11299*Vest. sel.-khoz. Nauk*, (8) : 58-67

Metody i effektivnost kormleniia ryby v prudakh (Methods and effectiveness of feeding fish in ponds). En De Fr

NAR 30 (4) 6247. All-Union Institute of Fishpond Culture made 80 practical trials with 30 types of food. Carp were found to eat without harm oil-cakes unsuitable for feeding livestock. By use of properly balanced mixtures yield was increased on some fish farms from between 6 and 7.5 to 20 or 25 centners per ha. Examples are given of managements and results on different farms. Natural foods should provide at least 16 or 17 per cent of diet.

**Sorvachev, K. F. & G. P. Novgorodova** (1959)F  
8-11300*Vestn. mosk. Univ.*, (Biol.), (4) : 17-23

Raspredelinie S<sup>35</sup>-metionina v organakh i tkaniakh karasei pri razlichnykh usloviakh obitaniia (Distribution of metionine-<sup>35</sup>S in organs and tissues of carp in different environmental conditions)

NAR 30 (4) 6250. *Carassius carassius*, placed in aquaria with labelled methionine.

**Neifakh, A. A. & I. M. Shapiro** (1962)

F  
8-11301

*Dokl. Akad. Nauk. SSSR*, 144 : 942-4

(A radiation study of the function of oocytes in the process of ovulation in the loach). *Ru*

NSA 16 (20) 26795.

**Radway, A. K.** (1961)

F  
8-11302

*Proc. N.Z. ecol. Soc.*, 8 : 66-70

Relations between Salmonidae and the native freshwater fauna in New Zealand

BA 38A (2) 4823.

**Goncharov, C. D.** (1959)

F  
8-11303

*Trud. Soveshch. ikhtiol. Kom.*, 9 : 34-8

Virusnaia krasnukha ryb v SSSR i za rubezhom (Virus dropsy of fish in the USSR and abroad)

BA 38A (2) 4952.

**Goncharov, G. D.** (1960)\*

F  
8-11304

*Referat. Zh. (Biol.) (En Transl.)*, 100141

Virus dropsy of fish in the USSR and abroad

*En* 8-11303.

**Kanaev, A.** (1961)

F  
8-11305

*Rybovod. i Rybolov.*, 1 : 14-7

Sanitarnaia obrabotka prudov (Sanitational treatment of ponds)

BA 38A (2) 4956.

**Kanaev, A.** (1961)\*

F  
8-11306

*Referat. Zh. (Biol.) (En Transl.)*, 13D417

Sanitational treatment of ponds

*En* 8-11305.

**Kanaev, A. I. & E. M. Lyaiman** (1959)

F  
8-11307

*Trud. Soveshch. Ikhtiol. Kom.*, 9 : 28-33

Epizooticheskoe sostoianie stada ryb v prudovykh khoziaistvakh RSFSR (The situation as regards epidemic fish diseases in hatcheries of the RSFSR)

BA 38A (2) 4957. Four infectious and 9 invasive diseases of carp were found in the hatcheries of the RSFSR.

- F  
8-11308
- Kanaev, A. I & E. M. Lyaiman** (1960)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 100140  
 The situation as regards epidemic fish diseases in hatcheries of the RSFSR  
*En* 8-11307.

- F  
8-11309
- Kelley, J. W.** (1962)  
*Trans. Amer. Fish. Soc.*, 91 (1) : 23-8  
 Sexual maturity and fecundity of the largemouth bass *Micropterus salmoides* (Lacépède), in Maine  
 BA 38A (2) 4958.

- F  
8-11310
- Kramer, R. H. & L. L. Smith, Jr.** (1962)  
*Trans. Amer. Fish. Soc.*, 91 (1) : 29-41  
 Formation of year classes in largemouth bass  
 BA 38A (2) 4959.

- F  
8-11311
- Lopukhina, A. M.** (1959)  
*Trud. Soveshch. Ikhtiol. Kom.*, 9 : 110-3  
 Zabolevaniia sigovykh i amurskikh ryb pri ikh vyrashchivanii v prudovykh khoziaistvakh USSR (Diseases of whitefishes and oriental carps when reared in the ponds of the Ukrainian SSR)  
 BA 38A (2) 4964.

- F  
8-11312
- Lopukhina, A. M.** (1960)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 100145  
 Diseases of whitefishes and oriental carps when reared in the ponds of the Ukrainian SSR  
*En* 8-11311.

- F  
8-11313
- Maloney, J. E., D. H. Schupp & W. J. Scidmore** (1962)  
*Trans. Amer. Fish. Soc.*, 91 (1) : 42-52  
 Largemouth bass population and harvest, Gladstone Lake, Crow Wing County, Minnesota  
 BA 38A (2) 4967. Factors influencing angling exploitation and size-structure of the catch of largemouth bass (*Micropterus salmoides*) from a 481-acre Minnesota lake are considered.

F

**McFadden, J. T. & E. L. Cooper** (1962)

8-11314

*Trans. Amer. Fish. Soc.*, 91 (1) : 53-62An ecological comparison of six populations of brown trout (*Salmo trutta*)

BA 38A (2) 4969. Estimates of population density of all species of fish except the sculpin were made in selected areas of three hard-water streams and three soft-water streams in Pennsylvania to compare these two water-types.

F

**McFadden, J. T., E. L. Cooper & J. K. Andersen** (1962)

8-11315

*Trans. Amer. Fish. Soc.*, 91 (1) : 94-5

Sex ratio in wild populations of brown trout

BA 38A (2) 4970. The sex ratio of brown trout (*Salmo trutta*) was determined by dissection of 810 specimens captured from 12 streams in Pennsylvania.

F

**Minckley, W. L.** (1962)

8-11316

*Trans. Amer. Fish. Soc.*, 91 (1) : 95

Spring foods of juvenile blue catfish from the Ohio River

BA 38A (2) 4973. The stomachs of 21 juvenile *Ictalurus furcatus* (LeSueur) contained primarily benthic aquatic insects in March.

F

**Mueller, J. W. & L. C. Rockett** (1962)

8-11317

*Trans. Amer. Fish. Soc.*, 91 (1) : 63-8

The effect of harvest, migration and stocking on the rainbow trout spawning potential in a Wyoming Lake

BA 38A (2) 4976. Lake DeSmet, a 2,100 acre lake, is managed for rainbow trout (*Salmo gairdneri*) production and is a primary source of eggs.

F

**Shpolianskaia, A. Iu.** (1959)

8-11318

*Trud. Soveshch. ikhtiol. Kom.*, 9 : 81-5

Zabolevaniia ikry i molodi ryb na rybovodynykh predpriiatiakh Rosglavgosrybvoda (Disease of the eggs and young fish in fish rearing stations of the Russian State Fisheries Administration)

BA 38A (2) 4988.

F

**Shpolyanskaya, A. Yu.** (1960)\*

8-11319

*Referat. Zh. (Biol.) (En Transl.)*, 100142

Disease of the eggs and young of fish in fish rearing stations of the Russian State Fisheries Administration

*En* 8-11318.



- F  
8-11320
- Sukhoverkhov, F. & P. Krymova** (1961)  
*Rybovod. i Rybolov.*, 1 : 18-9  
 Vliianie solei kobal'ta na rost karpa (Effect of cobalt salts on the growth of carp)

BA 38A (2) 4992.

- F  
8-11321
- Sukhoverkhov, F. & P. Krymova** (1961)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 13D418  
 Effect of cobalt salts on the growth of carp

*En* 8-11320.

- F  
8-11322
- Cooper, E. L., J. A. Boccardy & J. K. Andersen** (1962)  
*Progr. Fish. Cult.*, 24 (2) : 74-80  
 Growth rate of brook trout at different population densities in a small infertile stream

BA 39A (5) 17731. Growth of brook trout (*Salvelinus fontinalis*) in a small infertile tributary stream of the Appalachian Mountains is apparently controlled by a combination of factors, and not by population density alone.

- F  
8-11323
- Dmitrieva, E. N.** (1960)  
*Trud. Inst. Morf. Zhiv.*, 25 : 99-136  
 Sravnitel'nyi analiz etapov razvitiia sudaka *Lucioperca lucioperca* (Linné) Volgi, Dona i Kubani (A comparative analysis of the stages of development of pike-perches (*Lucioperca lucioperca* Linné) from the Volga, Don and Kuban Rivers)

BA 39A (5) 17734.

- F  
8-11324
- Dmitrieva, E. N.** (1961)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 1D454  
 A comparative analysis of the stages of development of pike-perches (*Lucioperca lucioperca* Linné) from the Volga, Don and Kuban Rivers)

*En* 8-11323.

- F  
8-11325
- Swift, D. R. & G. E. Pickford** (1962)  
*Amer. Zool.*, 2 (3) : 451  
 Seasonal variations in the growth hormone content of pituitary glands of the perch, *Perca fluviatilis* L

Study of growth promoting potency of perch pituitary glands collected from Windermere at different times of the year. Male *Fundulus heteroclitus*, hypophysectomized 8-9 weeks, received intraperitoneal injections thrice weekly for 6 weeks. CR 8-06426.

- F  
8-11326
- Morton, K. E.** (1962)  
*Progr. Fish. Cult.*, 24 (2) : 94-6  
Experimental heating of pond water to start rainbow trout fry on a dry diet

BA 39A (5) 17744.

- F  
8-11327
- Shanks, W. E., G. D. Gahimer & J. E. Halver** (1962)  
*Progr. Fish. Cult.*, 24 (2) : 68-73  
The indispensable amino acids for rainbow trout

BA 39A (5) 17751.

- F  
8-11328
- Singh, V. P.** (1961)  
*Proc. zool. Soc. Bengal*, 14 (1) : 53-60  
An investigation into the composition of the algal food of *Gadusia chapra* (Ham.)

BA 39A (5) 17754.

- F  
8-11329
- Belyi, N. D.** (1961)  
*Ryb. Khoz.*, 6 : 25-7  
Razmnozhenie ryb na iskusstvennykh gnezdkakh v Kakhovskom vodokhranilishche (The reproduction of fish in artificial nests in the Kakhovsk reservoir)

BA 39E (6) 21797.

- F  
8-11330
- Belyi, N. D.** (1962)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 2167  
The reproduction of fish in artificial nests in the Kakhovsk reservoir  
*En* 8-11329.

- F  
8-11331
- Levinson, M. D.** (1961)  
*Ryb. Khoz.*, 4 : 28-31  
Sokhranit' i uvelichit' zapasy Dneprovskogo leshcha i sudaka (Conserve and increase the stock of Dnepr bream and zander)

BA 39E (6) 21814. Observations on *Stizostedion lucioperca* and *Abramis brama*.

- F  
8-11332
- Levinson, M. D.** (1962)\*  
*Referat. Zh. (Biol.) (En Transl.)*, 2160  
Conserve and increase the stocks of Dnepr bream and zander  
*En* 8-11331.

MISCELLANEOUS AND AUXILIARIES

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**Anon. (1963)**

M  
8-11333

*Fish. Newslett. Aust.*, 22 (2) : 16

200 ft. down, 26 hours at surface pressure

Issued also as: *New Scient.*, 15 (305) : 596.

**Tasmania. Laws, Statutes, etc. (1962)**

M  
8-11334

*Statut. Rules Aust.*, (86) : 2 p.

Fisheries (scallop season) order 1962, made under the fisheries act 1959.—  
9 May 1962

Regulations in respect of open and closed areas and seasons for the taking  
of scallop.

**Tasmania. Laws, Statutes, etc. (1962)**

M  
8-11335

*Statut. Rules Aust.*, (87) : 32 p.

Sea fisheries regulations 1962, made under the fisheries act 1959.—9 May  
1962

Extensive regulations in respect of licensing, prohibitions and protection  
of certain species, fishing craft, penalties, etc.

**Canada. Laws, Statutes, etc. (1962)**

M  
8-11336

*Can. Gaz. (II)*, (19) : 1048

SOR/62-370. Order in council P.C. 1962-1345 amending the New Brunsw-  
wick fishery regulations made under the fisheries act.—27 September 1962

Amendment respecting quahaug fishing in part of Miramichi Bay.

**Canada. Laws, Statutes, etc. (1962)**

M  
8-11337

*Can. Gaz. (II)*, (19) : 1097

DORS/62-370. Décret C.P. 1962-1345 modifiant le règlement de pêche  
du Nouveau-Brunswick en vertu de la loi sur les pêcheries.—27 septembre  
1962 (SOR/62-370. Order in council P.C. 1962-1345 amending the New  
Brunswick fishery regulations made under the fisheries act.—27 September  
1962)

Fr 8-11336.

**Canada. Laws, Statutes, etc. (1962)**

M  
8-11338

*Can. Gaz. (II)*, (19) : 1049

SOR/62-371. Order in council P.C. 1962-1346 amending the Nova Scotia  
fishery regulations made under the fisheries act.—27 September 1962

Concerns closed season for oysters.

M

**Canada. Laws, Statutes, etc. (1962)**

8-11339

*Can. Gaz. (II)*, (19) : 1098

DORS/62-371. Décret C.P. 1962-1346 modifiant le règlement de pêche de la Nouvelle Écosse en vertu de la loi sur les pêcheries.—27 septembre 1962 (SOR/62-371. Order in council P.C. 1962-1346 amending the Nova Scotia fishery regulations made under the fisheries act.—27 September 1962)

*Fr* 8-11338.

M

**Canada. Laws, Statutes, etc. (1962)**

8-11340

*Can. Gaz. (II)*, (19) : 1050

SOR/62-372. Order in council P.C. 1962-1347, amending the Prince Edward Island fishery regulations made under the fisheries act.—27 September 1962

Prohibits the use of an otter trawl in fishing from a vessel in the South Lake harbour area.

M

**Canada. Laws, Statutes, etc. (1962)**

8-11341

*Can. Gaz. (II)*, (19) : 1099

DORS/62-372. Décret C.P. 1962-1347 modifiant le règlement de pêche de l'Île-du-Prince-Édouard en vertu de la loi sur les pêcheries.—27 septembre 1962 (SOR/62-372. Order in council P.C. 1962-1347, amending the Prince Edward Island fishery regulations made under the fisheries act.—27 September 1962)

*Fr* 8-11340.

M

**France. Laws, Statutes, etc. (1962)**

8-11342

*J. off. Répub. franç.*, (75) : 3301

Arrêté du 19 février 1962 relatif à la pêche au feu dans les eaux de la direction de Marseille (Order relating to fishing with lights in the waters of the Marseille directorate.—19 February 1962)

Contains technical specifications.

M

**Iraq. Laws, Statutes, etc. (1960)**

8-11343

*Wkly Gaz. Rep. Iraq*, (43) : 837-43

Government notice No. 653. Law No. 22 of 1960 relative to the ratification of the trade agreement between the governments of the Republic of Iraq and the Kingdom of Denmark.—27 January 1960

Imports include tinned fish.



# MISCELLANEOUS AND AUXILIARIES

## **Iraq. Laws, Statutes, etc. (1960)**

M  
8-11344

*Wkly Gaz. Rep. Iraq*, (43) : 844-7

G.N. No. 564. Law No. 88 of 1960 relative to the ratification of the trade agreement between the governments of the Republic of Iraq and the Kingdom of Morocco.—17 July 1960

Imports include canned sardines.

## **Italy. Laws, Statutes, etc. (1962)**

M  
8-11345

*Gazz. uff. Repub. ital.*, (129) : 2064

Decreto ministeriale 24 marzo 1962 relativo alla disciplina dell'esercizio della pesca a strascico nelle acque del compartimento marittimo di Civitavecchia (Ministerial decree regulating trawl-fishing in the waters of the maritime department of Civitavecchia.—24 March 1962)

Authorized trawl-fishing for a period of one year at a distance of two miles from the coast.

## **Norway. Laws, Statutes, etc. (1962)**

M  
8-11346

*Norsk Lovtid.*, (5) : 50

Skriv om endring i forskrifter for handel med kraftfor og kunstgjødsel.—27. januar 1962 (Circular amending the provisions on trade in concentrated feeds and chemical fertilizers.—27 January 1962). *No*

Standards of composition for fishmeal and herring meal.

## **Peru. Laws, Statutes, etc. (1962)**

M  
8-11347

*Peruano*, (6339) : 2 p.

Resolución ministerial No. 1171-DC por la que se modifica el art. 2 de la res. min. No. DC-341 sobre elementos de salvataje en las embarcaciones pesqueras.—16 de mayo de 1962 (Ministerial resolution No. 1171-DC amending article 1 of ministerial resolution No. DC-341 on life saving equipment on board fishing vessels.—16 May 1962)

Compulsory equipment shall include inflatable or non-inflatable lifeboats with capacity for the whole crew and in keeping with the characteristics laid down in the agreements on life security at sea.

## **Peru. Laws, Statutes, etc. (1962)**

M  
8-11348

*Peruano*, (6321) : 1 p.

Decreto supremo No. 28 por el que se crea el Instituto Peruano de Especialización y Adiestramiento.—18 de mayo de 1962 (Supreme decree No. 28 establishing the Peruvian Specialization and Training Institute.—18 May 1962)

Institute's aims include determination of the country's needs in various fields including fishbreeding.

**Peru. Laws, Statutes, etc. (1962)**M  
8-11349*Peruano*, (6325) : 1-2

Decreto supremo No. 008 que contiene disposiciones normativas ampliando el reglamento de la ley sobre jubilación obrera.—24 de mayo de 1962 (Supreme decree No. 008 containing normative provisions amplifying the regulations governing the workmen's pensions act.—24 May 1962)

**Philippines. Laws, Statutes, etc. (1962)**M  
8-11350*Off. Gaz.*, Manila, (33) : 5521

Fisheries administrative orders Nos. 48-1 and 59-1 suspending the provisions of rule 3 (h) of F.A.O. No. 59 and sections 7, 8 and 9 of F.A.O. No. 48.—14 May 1962

To develop the pearl culture industry, foreign technicians may be invited to the country without the obligation of disclosing the secret technique on pearl culture and production. Repeals all orders, regulations or parts thereof inconsistent with this production. Repeals all orders, regulations or parts thereof inconsistent with this order.

**Portugal. Laws, Statutes, etc. (1962)**M  
8-11351*Diário do Gov.*, Lisboa, 1 (20) : 89-90

Decreto n.º 44 167 : autoriza a direcção-geral da fazenda pública a emitir, pelo fundo de renovação e de apetrechamento da indústria da pesca, o obreção geral representativa da 5.ª série do empréstimo de renovação e de apetrechamento da indústria da pesca (II plano de fomento), na importância de 74 000 000\$.—30 de janeiro de 1962 (Decree No. 14 167 authorizing the directorate-general of public finance to issue through the fishing industry renewal and supplies fund the bonds representing the 5th series of the fishing industry renewal and supplies loan (2nd development plan) for the amount of 74 million escudos.—30 January 1962). *Pr*

**Portugal. Laws, Statutes, etc. (1962)**M  
8-11352*Diário do Gov.*, Lisboa, 1 (22) : 96

Decreto n.º 44 173: autoriza a direcção geral da fazenda pública a emitir, pelo fundo de renovação da marinha mercante, a obrigação geral representativa da 4.ª série do empréstimo de renovação da marinha mercante (II plano de fomento), na importância de 100 000 000\$.—1 de fevereiro de 1962 (Decree No. 44 173 authorizing the directorate-general of public finance to issue on behalf of the merchant marine renewal fund, the bonds representing the 4th series of the merchant marine renewal loan (2nd development plan) for an amount of 100 million escudos.—1 February 1962). *Pr*

**Portugal. Laws, Statutes, etc. (1962)**M  
8-11353*Diário do Gov.*, Lisboa, 1 (23) : 97

Decreto n.º 44 174: adita varias disposições ao decreto n.º. 41 451, que actualiza e amplia a legislação que regula a industria da pesca da sardinha.—2 de fevereiro de 1962 (Decree No. 44 174 adding various provisions to the decree No. 41 541 bringing up to date and supplementing the legislation regulating the sardine fishing industry.—2 February 1962). *Pr*

Deals with registration and changes in the place of registration of vessels.

M  
8-11354

**Portugal. Laws, Statutes, etc. (1962)**  
*Diário do Gov., Lisboa, 1 (72 Suppl.) : 321*

Decreto-lei n.º 44 259: determina que ficam sujeitos às disposições da legislação do contencioso aduaneiro de território onde tiver sido emitido o certificado os responsáveis pelo fornecimento de falsas declarações para a emissão dos certificados de origem nacional das mercadorias transaccionadas entre territórios nacionais ou quem emita esses certificados com dados falsos ou inexactos.—31 de março de 1962 (Decree Law No. 44 259 providing that persons responsible for providing false information in connection with the issue of national certificates of origin in respect of goods entering into trade between national territories and also persons issuing such certificates with false or inaccurate data shall be subject to the provisions of the customs disputes legislation of the territory where the false certificate was issued.—31 March 1962). *Pr*

Also covers fish, crustaceans and molluscs.

M  
8-11355

**Portugal. Laws, Statutes, etc. (1962)**  
*Diário do Gov., Lisboa, 1 (92) : 543*

Decreto n.º 44 296: autoriza a importação, sob regime de drawback, de tiras de alumínio, de espessura não inferior a 0,3 mm, destinadas ao fabrico de embalagens de conserva de peixe—Permite aos importadores, sem dependência de prévio despacho ministerial, usar de faculdade de garantir os direitos nos termos do artigo 443.º-A do regulamento das alfândegas.—24 de abril de 1962 (Decree No. 44 296 authorizing the import under drawback of aluminium strips not less than 0.3 mm thick for the manufacture of fish preserve containers and permitting importers to guarantee duties without previous ministerial authorization in accordance with article 443-A of the customs house regulations.—24 April 1962). *Pr*

M  
8-11356

**Portugal. Laws, Statutes, etc. (1962)**  
*Diário do Gov., Lisboa, 1 (107) : 708*

Portaria n.º 19 181: introduz alterações no regimento da corporação da pesca e conservas, aprovado pela portaria n.º 16 875.—11 de maio de 1962 (Order No. 19 181 making amendments to the regulations governing the fisheries and fish preserves corporation as approved under order No. 16 875.—11 May 1962). *Pr*

Amendments of an administrative nature.

M  
8-11357

**Portugal. Laws, Statutes, etc. (1962)**  
*Diário do Gov., Lisboa, 1 (135) : 814-20*

Decreto n.º 44 398: aprova o regulamento da pesca de arrasto na provincia de Angola—Revoga o decreto de 15 de fevereiro de 1913, que aprovou o regulamento para a pesca no mar de Angola com embarcações a vapor e demais legislação que contrarie o disposto no presente diploma.—14 de junho de 1962 (Decreto No. 44 398 approving the trawl and drag fish regulations in the province of Angola, and repealing the decree of 15 February 1913 which approved the Angola sea fishing regulations using steam vessels and also all other legislation running counter to the provisions of this decree.—15 June 1962). *Pr*

Extensive legislation concerning fishing areas, fishing craft, equipment, etc.

**Portugal. Laws, Statutes, etc. (1962)**M  
8-11358*Diário do Gov., Lisboa*, 1 (138) : 829-33

Lei n.º 2115: promulga as bases da reforma da previdência social—Revoga a lei n.º 1884.—18 de junho de 1962 (Act No. 2115 promulgating the bases of social provident fund reform and repealing act No. 1884.—18 June 1962). *Pr*

Also covers fishermen. Repeals act of 16 March 1935.

**Portugal. Laws, Statutes, etc. (1962)**M  
8-11359*Diário do Gov., Lisboa*, 1 (146) : 885

Decreto n.º 44 423: d ánova redacção aos artigos 41.º, 45.º, et 46.º do regulamento da pesca de arrasto, promulgado pelo decreto n.º 36 615.—28 de junho de 1962 (Decree No. 44 423 redrafting articles 41, 45 and 46 of the trawl and drag fishing regulations as promulgated under decree No. 36 615.—28 June 1962). *Pr*

Amends decree of 24 Nov. 1947 and provides for penalties in the case of certain types of violation of existing regulations with respect to permitted fishing areas.

**Spain. Laws, Statutes, etc. (1962)**M  
8-11360*Bol. ofic. Estado, Madr.*, (170) : 9915-6

Orden de 27 de junio de 1962 por la que se aprueba el cuadro general de vedas y dimensiones mínimas para la captura, circulación y venta en todo el territorio nacional de crustáceos y moluscos, así como las denominaciones de las concesiones de la zona marítimo-terrestre para su aprovechamiento pesquero (Order approving the general rules governing prohibitions and minimum sizes for the capture, transport and sale throughout the territory of the country of crustaceans and molluscs and also approving the denomination of the concessions in the coastal area where they may be fished.—27 June 1962)

**U.K. Laws, Statutes, etc. (1962)**M  
8-11361*Statut. Instrum. U.K.*, (1615) : 4 p.

The herring subsidy (United Kingdom) scheme 1962.—4 July 1962

Provides for the payment of grants to the owners or charterers of fishing vessels engaged in catching herring, according to the category of the vessel.

**U.K. Laws, Statutes, etc. (1962)**M  
8-11362*Statut. Instrum. U.K.*, (1616) : 6 p.

The herring industry (grants for fishing vessels and engines) scheme 1962.—4 July 1962

Concerns payment, by the Herring Industry Board, of grants to persons engaged, or proposing to become engaged, in the herring industry in respect of expenditure incurred in the acquisition of new fishing vessels and engines.



## MISCELLANEOUS AND AUXILIARIES

M  
8-11363

**U.K. Laws, Statutes, etc. (1962)**  
*Statut. Instrum. U.K.*, (2158) : 4 p.

The several and regulated fisheries (form of application) regulations 1962.—  
 21 September 1962

Prescribe the form of application to be submitted for the grant of several  
 or regulating orders in respect of oyster, mussel or cockle fisheries under part  
 3 of the sea fisheries act 1868.

M  
8-11364

**North Borneo. Laws, Statutes, etc. (1962)**  
*Govt Gaz.*, (4), 1st Suppl. : 135-6

No. 11 of 1962. The pearl oyster shell fishery (amendment) ordinance,  
 1962: an ordinance to amend the pearl oyster shell fishery ordinance. (Chap-  
 ter 95 of the revised edition.—22 September 1962

Various amendments of working; in respect of granting permits to engage  
 in the industry of pearl culture, etc.

M  
8-11365

**Seychelles. Laws, Statutes, etc. (1962)**  
*Seychelles Govt Gaz.*, (45) : 47-8

S.I. No. 32 of 1962: the fisheries regulations (No. 2), 1962 made under the  
 fisheries ordinance (Chapter 16).—2 August 1962

In respect of fishing reserves. Prohibits the dragging of any net across the  
 seabed of reserves. Repeals the fisheries regulations, 1962.

M  
8-11366

**Seychelles. Laws, Statutes, etc. (1962)**  
*Seychelles Govt Gaz.*, (52 Suppl.) : 68

S.I. No. 42 of 1962: the female turtles protection (No. 2) regulations, 1962  
 made under the turtles ordinance (Chapter 22).—1 October 1962

In respect of the green turtle or 'tortue de mer'.

M  
8-11367

**Renaud-Debyser, J. & B. Salvat (1963)**  
*C.R. Acad. Sci., Paris*, 256 (12) : 2712-4

Le calcul de biovolumes dans l'étude des chaînes alimentaires de la faune  
 endogée des sédiments meubles intertidaux (The estimation of biovolumes  
 in the study of food chains in the endogenous fauna of the intertidal mobile  
 sediments)

Preliminary note: discusses the value of quantitative estimation of biomass  
 in connection with the evaluation of food competition and biocoenoses  
 composition.

Quillet, M. & M.-L. Priou (1963)

M  
8-11368

*C.R. Acad. Sci. Paris*, 256 (13) : 2903-5

Sur la présence de la chitine dans les membranes de quelques algues rouges: Céramiacées et Lomentariacées (On the presence of chitin in the membrane of some red algae: Ceramiceae, and Lomentariaceae)

Preliminary results on *Bornetia secundiflora*, *Griffithsia flosculosa*, *Ceramium rubrum* and *Lomentaria articulata*.

Vicente, N. (1963)

M  
8-11369

*C.R. Acad. Sci., Paris*, 256 (13) : 2928-30

Ablation de ganglions nerveux et osmorégulation chez *Aplysia rosea* Rathke (Gastéropode opisthobranche) (Removal of the nervous ganglions and osmoregulation in *Aplysia rosea* Rathke (Gasteropoda, Opisthobranchiata))

Vanney, J.-R. & Guilcher (1963)

M  
8-11370

*C.R. Acad. Sci., Paris*, 256 (14) : 3170-1

La répartition des fonds sous-marins dans le 'Mor Bras' (Morbihan). Résultats préliminaires (The zonation of submarine bottoms in the 'Mor Bras' (Morbihan). Preliminary results)

Discusses results based on echo-sounding and dredging made during the spring 1962. Cruise of the 'Kornog'.

Argentina. Laws, Statutes, etc. (1962)

M  
8-11371

*Bol. ofic. Argent.*, (19.873) : 2 p.

Resolución N° 339 por la que se dictan normas a los exportadores.—3 de julio de 1962 (Resolution No. 339 laying down rules for exporters.—3 July 1962)

Exporters of a wide range of products, including fish, must submit a sworn statement in respect of the goods they are exporting to the National Directorate of External Trade.

Australia. Commonwealth Laws, Statutes, etc. (1962)

M  
8-11372

*Commonw. Aust. Gaz.*, (101) : 4374-5

Pearl fisheries notice No. 1 made under the pearl fisheries act 1952-1953.—20 November 1962

Contains prohibitions relating to taking of pearl shell (of the species *Pinctada margaritifera*), trochus and green snail, under the prescribed sizes and within the waters specified, except under a special permit.

# MISCELLANEOUS AND AUXILIARIES

M  
8-11373

**Australia. Commonwealth Laws, Statutes, etc. (1962)**  
*Commonw. Aust. Gaz.*, (101) : 4375

Pearl fisheries notice No. 2 made under the pearl fisheries act 1952-1953. —  
 20 November 1962

Contains prohibitions relating to taking of pearls shell of the species  
*Pinctada maxima* under the prescribed sizes and within the waters specified,  
 except under a special permit.

M  
8-11374

**Australia. Commonwealth Laws, Statutes, etc. (1962)**  
*Commonw. Aust. Gaz.*, (101) : 4375

Pearl fisheries notice No. 3 made under the pearl fisheries act 1952-1953. —  
 20 November 1962

Contains prohibitions relating to the method of taking pearl shell, trochus,  
 bêche-de-mer or green snail, except under a special permit.

M  
8-11375

**Australia. Commonwealth Laws, Statutes, etc. (1962)**  
*Commonw. Aust. Gaz.*, (101) : 4375

Pearl fisheries notice No. 4 made under the pearl fisheries act 1952-1953. —  
 20 November 1962

Contains prohibitions relating to the removal of live pearl shell, trochus,  
 bêche-de-mer and green snail, except under a special permit.

M  
8-11376

**New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (108) : 3190

Proclamation made under the fisheries and oyster farms act, 1935-1960. —  
 10 October 1962

Prohibits the taking of fish by spears aided by lights, in the specified tidal  
 waters, from 23 Nov. 1962 to 22 Nov. 1972.

M  
8-11377

**New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (118) : 3455

Proclamation, made under the fisheries and oyster farms act, 1935-1960,  
 relating to portion of the waters of Salamander Bay, county of Gloucester. —  
 31 October 1962

Prohibits the taking of fish by the use of hauling nets in the tidal waters  
 specified, from 1 Feb. 1963 to 31 Jan. 1968.

M  
8-11378

**Queensland. Laws, Statutes, etc. (1962)**  
*Qd Govt Gaz.*, (34) : 804

Order in council amending the order in council of 22 December 1949,  
 made under the fisheries act, 1957 to 1959. — 8 November 1962

Addition of a twenty-fifth schedule in respect of bait for taking sprats,  
 anchovies, pilchards, herrings and hardiheads in tidal waters.

- M  
8-11379
- Queensland. Laws, Statutes, etc. (1962)**  
*Qd Govt Gaz.*, (34) : 805  
 Order in council made under the fisheries act, 1957 to 1959.—8 November 1962

Prohibits, as from 1 January 1963, the taking by the use of a net of all fish in the specified waters, between 6 p.m. on Friday and 6 p.m. on Sunday of every week in each year, exception being made as regards in particular the taking of herrings, hard-heads and prawns by the use of a cast net.

- M  
8-11380
- Queensland. Laws, Statutes, etc. (1962)**  
*Qd Govt Gaz.*, (38) : 886  
 Order in council made under the fisheries acts, 1957 to 1959.—15 November 1962

Repeals the order of 15 Mar. 1962 and prohibits the taking of fish in the specified waters by any net, except the taking of herrings, hardiheads, or prawns by means of a cast or "umbrella" net.

- M  
8-11381
- Queensland. Laws, Statutes, etc. (1962)**  
*Qd Govt Gaz.*, (43) : 1324  
 Order in council made under the fisheries acts, 1957 to 1962.—29 November 1962

Repeals order in council of 11 Nov. 1948. Prohibits the taking of fish by the use of a net in the waters and during the periods specified, except herrings, hardi-heads, or prawns by a cast or "umbrella" net, and sprats, anchovies, pilchards, herrings or hardiheads by a bait net.

- M  
8-11382
- Queensland. Laws, Statutes, etc. (1962)**  
*Qd Govt Gaz.*, (43) : 1324  
 Order in council made under the fisheries acts, 1957 to 1962.—29 November 1962

Authorizes the taking (i) of herrings, hardiheads and prawns by a cast or "umbrella" net ; (ii) the taking of sprats, anchovies, pilchards, herrings and hardiheads by a bait net.

- M  
8-11383
- Queensland. Laws, Statutes, etc. (1962)**  
*Qd Govt Gaz.*, (43) : 1324-5  
 Order in council made under the fisheries acts, 1957 to 1962.—29 November 1962

Prohibits the taking of fish by the use of a net in the waters and during the periods specified, except herrings, hardiheads or prawns by a cast or "umbrella" net, and sprats, anchovies, pilchards, herrings or hardiheads by a bait net.



M

**Federal Republic of Cameroun. Laws, Statutes, etc. (1962)** 8-11384  
*J. off. Caméroun*, (13) : 664

Décret 62-DF-216 du 25 juin 1962 définissant les lignes à partir desquelles dans les golfes, baies et rades sont comptées les eaux territoriales camerounaises (Decree 62-DF-216 defining the delimitations from which the Cameroon territorial waters, within gulfs, bays and roadsteads are reckoned.—25 June 1962)

Under article 5 of the merchant marine code, the territorial waters of Cameroon have a breadth of six nautical miles.

M

**Canada. Laws, Statutes, etc. (1962)** 8-11385  
*Can. Gaz. (II)*, (21) : 1165

SOR/62-418. Order in council P.C. 1962-1502 amending the Nova Scotia fishery regulations, made under the fisheries act.—25 October 1962

Description of contaminated areas where the taking of shellfish is prohibited.

M

**Canada. Laws, Statutes, etc. (1962)** 8-11386  
*Can. Gaz. (II)*, (21) : 1219

DORS/62-418.—Décret C.P. 1962-1502 modifiant le règlement de pêche de la Nouvelle-Écosse en vertu de la loi sur les pêcheries.—25 octobre 1962 (SOR/62-418. Order in council P.C. 1962-1502 amending the Nova Scotia fishery regulations, made under the fisheries act.—25 October 1962)

*Fr* 8-11385.

M

**Canada. Laws, Statutes, etc. (1962)** 8-11387  
*Can. Gaz. (II)*, (21) : 1178-81

SOR/62-426. Amendment of the ships' crews regulations, 1960, made under the financial administration act.—25 October 1962

Concerns payment for security duty, payment for holidays, sick leaves, military leaves, etc.

M

**Canada. Laws, Statutes, etc. (1962)** 8-11388  
*Can. Gaz. (II)*, (21) : 1232-5

DORS/62-426. Modifications du règlement de 1960 concernant les équipages de navires, en vertu de la loi sur l'administration financière.—25 octobre 1962 (SOR/62-426. Amendment of the ships' crews regulations, 1960, made under the financial administration act.—25 October 1962)

*Fr* 8-11387.

M

**Canada. Laws, Statutes, etc. (1962)** 8-11389  
*Can. Gaz. (II)*, (22) : 1224

SOR/62-446. Shellfishing order pursuant to the New Brunswick fishery regulations made under the fisheries act.—29 October 1962

Reopens several shellfish areas for the taking of clams.

- Canada. Laws, Statutes, etc. (1962)** M  
8-11390  
*Can. Gaz. (II), (22) : 1278*

DORS/62-446. Ordonnance sur la pêche coquillière en vertu du règlement de pêche du Nouveau-Brunswick, selon la loi sur les pêcheries.—29 octobre 1962 (SOR/62-446. Shellfishing order pursuant to the New Brunswick fishery regulations made under the fisheries act.—29 October 1962)

*Fr* 8-11389.

- Colombia. Laws, Statutes, etc. (1962)** M  
8-11391  
*Diario ofic., Bogota, (30891) : 619*

Resolución Núm. 0059 de 17 de enero de 1962 que fija modalidades para la pesca de la langosta en la costa Atlántica (Resolution No. 0059 laying down the measures governing lobster fishing on the Atlantic coast.—17 January 1962)

Prohibits lobster fishing off the Atlantic coast between 1 Feb. and 30 Jun. inclusive each year.

- Colombia. Laws, Statutes, etc. (1962)** M  
8-11392  
*Diario ofic., Bogota, (30852) : 124*

Decreto Núm. 1656 de 28 de junio de 1962 por el cual se fijan modalidades para la expedición de patentes y se deroga el artículo 7° del decreto No. 1409 de 1958 (Decree No. 1656 laying down the terms for the issue of fishing licences and rescinding article 7 of decree No. 1409 of 1958.—28 June 1962)

Article 7 of decree No. 1409 forbade the fishing of shrimps by any vessels not flying the Colombian flag.

- U.K. Laws, Statutes, etc. (1962)** M  
8-11393  
*Statut. Instrum. U.K., (1454), (S.62) : 2 p.*

The sea fisheries (Scotland) byelaw (No. 67) 1962.—7 May 1962

Permits, on certain conditions, the use of a trawl net for the capture of Norway lobsters in certain waters in the Firth of Forth.

- U.K. Laws, Statutes, etc. (1962)** M  
8-11394  
*Statut. Instrum. U.K., (1453), (S.61) : 2 p.*

The sea fisheries (Scotland) byelaw (No. 66) 1962.—7 May 1962

Permits on certain conditions, the use of a trawl net for the capture of Norway lobsters in certain waters in the Moray Firth.

- Sweden. Laws, Statutes, etc. (1962)** M  
8-11395  
*Svensk FörfSaml., (294) : 651-2*

Kungl. maj:ts kungörelse Nr 294 om undatang från förbudet mot trålfiske vid rikets västra kust.—6 juni 1962 (Royal order No. 294, granting exceptions to the prohibition of trawl fishing on the eastern coast.—6 June 1962).  
*Sv*

**South Africa, Republic of. Laws Statutes, etc. (1962)**

M  
8-11396

*Govt Gaz., S. Afr.*, (367) : 22

Government notice No. 1853: amendment to regulations made under the sea fisheries act, 1940.—9 November 1962

Amends the regulations published in G.N. No. 1214 of 15 Dec. 1961, in respect of the collection of crabs, oysters, mussels and other species of bait.

**France. Laws, Statutes, etc. (1962)**

M  
8-11397

*J. off. Répub. franç.*, (154) : 6388-9

Décret n° 62-713 du 27 juin 1962 rendant applicables aux navires immatriculés dans les territoires d'outre-mer de la république certains décrets sur la sauvegarde de la vie humaine en mer et l'habitabilité à bord des navires de commerce, de pêche et de plaisance d'une jauge brute inférieure à 500 tonneaux (Decree No. 62-713, rendering applicable to ships registered in the overseas territories of the republic certain decrees relating to the safety of life at sea and living conditions aboard commercial, fishing and pleasure craft less than 500 gross tons.—27 June 1962)

Lists the decrees made under the act of 6 Jan. 1945 relating to the safety of life at sea and living conditions aboard commercial fishing and pleasure craft.

**France. Laws, Statutes, etc. (1962)**

M  
8-11398

*J. off. Répub. franç.*, (167) : 7019

Arrêté du 9 juillet 1962 normalisant le poids du poisson contenu dans les conserves (Order standardizing the weight of fish contained in preserves.—9 July 1962)

Drained weight of fish in brine, except tuna and mackerel.

**France. Laws, Statutes, etc. (1962)**

M  
8-11399

*J. off. Répub. franç.*, (195) : 8236

Décret n° 62-971 du 13 août 1962 complétant le décret n° 61-606 du 10 juin 1961 rendant applicables aux navires immatriculés dans les territoires d'outre-mer de la république certains décrets sur la sauvegarde de la vie humaine en mer et l'habitabilité à bord des navires de commerce, de pêche et de plaisance d'une jauge brute égale ou supérieure à 500 tonneaux (Decree No. 62-971, supplementing decree No. 61-606 of 10 June 1961, rendering applicable to ships registered in the overseas territories of the republic certain decrees relating to the safety at sea and living conditions aboard commercial, fishing and pleasure craft of 500 gross tons or more.—13 August 1962)

Adds decrees relating to medical service and to navigation.

**Greece. Laws, Statutes, etc. (1962)**

M  
8-11400

*Ephem. Kybern.*, (II), (309) : 2391

(Ministerial decision No. 51886/6352 granting bonuses for the destruction of dolphins.—4 August 1962). *He*

- M
- Ivory Coast. Laws, Statutes, etc. (1962)** 8-11401  
*J. off. Côte d'Ivoire*, (37) : 899-900

Arrête 618 TP. FAEP. EL. du 7 juillet 1962 limitant le tonnage des chalutiers pêchant dans les eaux territoriales de la Côte d'Ivoire (Order No. 618 TP. FAEP. EL. limiting the tonnage of trawlers fishing in the territorial waters of Ivory Coast.—7 July 1962)

The sum of the trawlers fishing in the territorial waters of Ivory Coast must not exceed a tonnage equal to the sum of trawlers at present fishing in the waters of the Ivory Coast.

- M
- Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11402  
*J. off. Répub. Maurît.*, (Spec. 79) : 48-58  
 Convention collective du travail en République Islamique de Mauritanie. Clauses générales.—5 janvier 1962 (Collective labour contract in the Islamic Republic of Mauritania.—5 January 1962)

Applies, *inter alia*, to workers in the fish preserves and salting industries.

- M
- Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11403  
*J. off. Répub. Maurît.*, (Spec. 80-81) : 100

Loi n° 62.011 portant création d'un droit fiscal de sortie sur les poissons salés.—15 janvier 1962 (Act No. 62.011 establishing a fiscal export duty on salted fish.—15 January 1962)

Amounts to 2.5% and also applies to fish in brine and dried and smoked fish.

- M
- Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11404  
*J. off. Répub. Maurît.*, (Spec. 80-81) : 116-36

Loi N° 62.038 portant code de la marine marchande et des pêches maritimes.—20 janvier 1962 (Act No. 62.038 laying down the merchant marine and sea fisheries codes.—20 January 1962)

Extensive provisions also including sea fisheries regulations.

- M
- Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11405  
*J. off. Répub. Maurît.*, (84-85) : 278

Arrêté n° 10.111 fixant les différentes zones de navigation maritime.—16 mars 1962 (Order No. 10.111 fixing the various maritime navigation zones.—16 March 1962)

Lays down different types of fishing areas.



# MISCELLANEOUS AND AUXILIARIES

M

**Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11406  
*J. off. Répub. Maurit.*, (91-92) : 345

Décret n° 62.110 fixant l'étendue des eaux territoriales dans les baies.—3 mai 1962 (Decree No. 62.110 fixing the extent of the territorial waters in bays.—3 May 1962)

Fixes straight lines in respect of specific bays as named.

M

**Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11407  
*J. off. Répub. Maurit.*, (91-92) : 344-5

Décret n° 62.116 fixant les parts de prises des agents habilités pour la recherche et la constatation des délits de pêches maritimes.—16 mai 1962 (Decree No. 62.116 fixing the share of fines to be allocated to the officials responsible for discovering sea fisheries offences.—16 May 1962)

In the case of imposition of fines, a 5% share is allocated to the responsible officials.

M

**Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11408  
*J. off. Répub. Maurit.*, (89-90) : 322

Décret no. 62.117 portant fixation de la taxe due pour la délivrance et le renouvellement des livrets professionnels des marins.—16 mai 1962 (Decree No. 62.117 fixing the tax due for the issue and renewal of seamen's certificates.—16 May 1962)

Made under act No. 62.038 of 20 Jan. 1962 laying down the merchant marine and sea fisheries code.

M

**Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11409  
*J. off. Répub. Maurit.*, (97-98) : 400

Décret n° 62.148 approuvant et rendant exécutoires les décisions prises les 12 janvier et 20 mars 1962 par le comité de l'union douanière des états de l'Afrique de l'ouest.—5 juillet 1962 (Decree No. 62.148 approving and giving effect to the decisions taken on 12 January and 20 March 1962 by the committee of the customs union of the west African states.—5 July 1962)

A large number of decisions which cover also fishing craft.

M

**Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11410  
*J. off. Répub. Maurit.*, (93-94) : 375-80

Arrêté n° 10.341 relatif aux conditions d'exercice de la profession des marins mauritaniens.—13 juillet 1962 (Order No. 10.341 relative to the conditions for exercising the seamen's profession in Mauritania.—13 July 1962)

Includes fishermen.

M

**Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11411  
*J. off. Répub. Maurît.*, (93-94) : 380

Arrêté n° 10.342 relatif au signalement extérieur permanent des navires en mer.—13 juillet 1962 (Order No. 10.342 relative to permanent markings to be borne on the outside of seagoing ships.—13 July 1962)

Includes fishing vessels.

M

**Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11412  
*J. off. Répub. Maurît.*, (99-100) : 434

Décret n° 62.183 fixant les taxes de jaugeage des navires de jauge brute inférieure à 500 tonneaux.—17 septembre 1962 (Decree No. 62.183 fixing the measurement taxes for ships of gross tonnage of less than 500 tons.—17 September 1962)

M

**Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)** 8-11413  
*J. off. Répub., Maurît.*, (99-100) : 435

Décret n° 62.185 fixant les taxes de visites des navires pour la délivrance, le maintien ou le renouvellement des titres de sécurité.—17 septembre 1962 (Decree No. 62.185 fixing ship inspection taxes for the issue, continuance and renewal of safety certificates.—17 September, 1962)

Includes inspection of fishing vessels of various kinds.

M

**Morocco. Laws, Statutes, etc. (1962)** 8-11414  
*Bull. off. Emp. chérif.*, (2604) : 1280-1, 1314-5

Arrêté n° 212-61 du 25 juillet 1962 relatif aux conditions d'aptitude physique à remplir pour la pratique de la pêche à la nage ou pêche sous-marine (Joint order No. 212-61 relating to conditions of physical aptitude required for engaging in under-water fishing.—25 July 1962)

A medical certificate is required.

M

**Norway. Laws, Statutes, etc. (1962)** 8-11415  
*Norsk Lovtid.*, (23) : 438

Skriv om heving oppsynet under vårtorskefisket i Finmark.—12. juni 1962 (Note suspending control over spring cod fishing in Finmark.—12 June 1962)

M

**Norway. Laws, Statutes, etc. (1962)** 8-11416  
*Norsk Lovtid.*, (27) : 573-4

Resolusjon om adgang for sovjetiske fiskefartøyer til å drive fiske innenfor den norske fiskerigrense og om kontroll med dette fisket.—20. july 1962 (Royal resolution concerning the limits of Norwegian fishing waters and control of fishing exercised therein.—20 July 1962)

Made under the act of 24 Mar. 1961 relative to Norwegian fishing limits Concerns rights granted to USSR fishing craft within 6 and 12 miles off the Norwegian coast until 31 Oct. 1970.

**Peru. Laws, Statutes, etc. (1962)**

**M**

**8-11417**

*Peruano*, (6331) : 2 p.

Resolución ministerial No. 1627 por la que se establece la revalidación de licencia para una fábrica de harina de pescado en Supe.—16 de abril de 1962 (Ministerial resolution No. 1627 revalidating a licence for a fish meal plant at Supe.—16 April 1962)

Revalidation of licence granted by ministerial resolution No. 2331 of 6 Sep. 1960.

**Peru. Laws, Statutes, etc. (1962)**

**M**

**8-11418**

*Peruano*, (6332) : 3 p.

Resolución ministerial No. 1818 por la que se otorga licencia provisional para una fábrica de harina de pescado en Supe.—26 de abril de 1962 (Ministerial resolution No. 1818 granting a provisional licence for a fish meal plant at Supe.—26 April 1962)

With a processing capacity of 15 tons of raw material per hour.

**Peru. Laws, Statutes, etc. (1962)**

**M**

**8-11419**

*Peruano*, (6308) : 1 p. (6309) : 2-3

Decreto supremo No. 110-J, en virtud de la ley No. 13,968, conteniendo el código de menores.—2 de mayo de 1963 (Supreme decree No. 110-J setting forth, under act No. 13,968, the minors' code.—2 May 1962)

Age limits are set as follows: minimum of 14 years for non-industrial agricultural labour, 15 years for industrial labour, 16 years for industrial fisheries, and 18 years for port and maritime work.

**Peru. Laws, Statutes, etc. (1962)**

**M**

**8-11420**

*Peruano*, (6378) : 2 p.

Resolución ministerial No. 2139 por la que se otorga licencia provisional para una fábrica de harina de pescado en Chancay.—11 de mayo de 1962 (Ministerial resolution No. 2139 granting a provisional licence for a fish meal plant at Chancay.—11 May 1962)

With a processing capacity of 10 tons per hour.

**Peru. Laws, Statutes, etc. (1962)**

**M**

**8-11421**

*Peruano*, (6331) : 2 p.

Resolución ministerial No. 2219 concediendo una licencia provisional para una fábrica de harina de pescado en Végueta.—15 de mayo de 1962 (Ministerial resolution No. 2219 granting a provisional licence for a fish meal plant at Végueta.—15 May 1962)

With a producing capacity of 6 tons per hour.

M

**Peru. Laws, Statutes, etc. (1962)**

8-11422

*Peruano*, (6342) : 3 p.

Resolución ministerial No. 2217 por la que se concede licencia provisional para fábrica de harina de pescado en Carquín.—15 de mayo de 1962 (Ministerial resolution No. 2217 granting a provisional licence for a fish meal plant at Carquín.—15 May 1962)

With a producing capacity of  $2\frac{1}{2}$  tons of meal per hour.

M

**Peru. Laws, Statutes, etc. (1962)**

8-11423

*Peruano*, (6378) : 2 p.

Resolución ministerial No. 2218 por la que se concede licencia provisional para fábrica de harina de pescado en Chancay.—15 de mayo de 1962 (Ministerial resolution No. 2218 granting a provisional licence for a fish meal plant at Chancay.—15 May 1962)

With a processing capacity of 30 tons per hour.

M

**Peru. Laws, Statutes, etc. (1962)**

8-11424

*Peruano*, (6331) : 2 p.

Resolución ministerial No. 2321 por la que se provee la construcción de una cámara isotérmica para el servicio de pesquería.—18 de mayo de 1962 (Ministerial resolution No. 2321 providing for the construction of an isothermal (constant temperature) chamber for the fisheries service.—18 May 1962)

Capacity of 17.08 cubic meters.

M

**Peru. Laws, Statutes, etc. (1962)**

8-11425

*Peruano*, (6342) : 1 p.

Ley No. 14084 por la que se establecen disposiciones para el control de los establecimientos de productos químicos o que fabriquen harina de pescado que contaminen el ambiente.—28 de mayo de 1962 (Act No. 14084 containing provisions for the control of establishments producing chemical products and manufacturing fish meal which contaminate the surrounding atmosphere.—28 May 1962)

Prescribes functions of the technical commission for the control of noxious emanations and wastes.

M

**Peru. Laws, Statutes, etc. (1962)**

8-11426

*Peruano*, (6348) : 2 p.

Resolución ministerial No. 2423 por la que se otorga licencia provisional para instalar una fábrica de harina de pescado en la zona de Ite.—28 de mayo de 1962 (Ministerial resolution granting a provisional licence to set up a fish meal plant in the Ite area.—28 May 1962)

With a processing capacity of 30 tons of raw material per hour.



# MISCELLANEOUS AND AUXILIARIES

M  
8-11427

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6335) : 1 p.

Resolución ministerial No. DC-1302 por la que se fija el salario básico para los tripulantes de los buques de la Compañía Ballenera del Norte.—2 de junio de 1962 (Ministerial resolution No. DC-1302 fixing the basic wages for the crews of the ships of the Compañía Ballenera del Norte.—2 June 1962)

Covers three categories of wage earners on whaling ships.

M  
8-11428

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6356) : 2 p.

Resolución ministerial No. 2563 por la que se otorga licencia provisional para fábrica de harina de pescado en Végueta.—4 de junio de 1962 (Ministerial resolution No. 2563 granting a provisional licence for a fish meal plant at Végueta.—4 June 1962)

With a processing capacity of 30 tons per hour.

M  
8-11429

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6356) : 2 p.

Resolución ministerial No. 2593 por la que se otorga licencia provisional para fábrica de harina de pescado en Carquín.—6 de junio de 1962 (Ministerial resolution No. 2593 granting a provisional licence for a fish meal plant at Carquín.—6 June 1962)

With a processing capacity of 6½ tons per hour.

M  
8-11430

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6354) : 2 p.

Resolución ministerial No. 2643 autorizando al sindicato de inversiones Rimac, a utilizar licencia provisional para una fábrica de harina de pescado en Supe.—8 de junio de 1962 (Ministerial resolution No. 2643 authorizing the Rimac investment syndicate to use a provisional licence for a fish meal plant at Supe.—8 June 1962)

Transfer of authorization granted by ministerial resolution No. 1627 of 16 April 1962.

M  
8-11431

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6378) : 2 p.

Resolución ministerial No. 2875 por la que se autoriza a la compañía pesquera La Gaviota a instalar fábrica de harina de pescado en Chancay.—25 de junio de 1962 (Ministerial resolution No. 2875 authorizing the fishing company La Gaviota to set up a fish meal plant at Chancay.—25 June 1962)

Transfer of authorization given by ministerial resolution No. 1400 of 4 April 1962.

M

**Peru. Laws, Statutes, etc. (1962)**

8-11432

*Peruano*, (6366) : 2 p.

Resolución ministerial No. 1043 por la que se establece que corresponde a la sociedad nacional de pesquería retirar los residuos de pescado del terminal marítimo.—28 de junio de 1962 (Ministerial resolution No. 1043 providing that it shall be the responsibility of the national fisheries society to dispose of fish waste from the marine terminal.—28 June 1962)

Applies to fish meal waste and excess sacks and consignments of fish meal for export from the port of Callao so that the Callao committee of the national fisheries society may distribute them to producers.

M

**Peru. Laws, Statutes, etc. (1962)**

8-11433

*Peruano*, (6393) : 3 p.

Resolución ministerial No. 3746 por la que se autoriza la caza beneficio de ballenas en el litoral de Tacna.—16 de julio de 1962 (Ministerial resolution No. 3746 authorizing commercial whaling activities off the coast of Tacna.—16 July 1962)

Authorizes the establishment of a land station.

M

**Peru. Laws, Statutes, etc. (1962)**

8-11434

*Peruano*, (6388) : 2 p.

Resolución ministerial No. 3886 por la que se amplían a las zonas pesqueras de litoral los efectos de la resolución ministerial de 13 de mayo de 1958.—26 de julio de 1962 (Ministerial resolution No. 3886 extending the provisions of the ministerial resolution of 13 May 1958 to coastal fishing areas.—26 July 1962)

The minimum size of fan-shaped shells that may be caught is four and a half centimetres.

M

**Peru. Laws, Statutes, etc. (1962)**

8-11435

*Peruano*, (6389) : 3 p.

Información oficial que contiene la aceptación de la convención internacional de seguridad de la vida humana en el mar.—7 de agosto de 1962 (Official communiqué containing acceptance of the international convention for the safety of life at sea.—7 August 1962)

As signed in London on 17 Jun. 1960.

M

**Peru. Laws, Statutes, etc. (1962)**

8-11436

*Peruano*, (6426) : 2 p.

Resolución ministerial No. 4038 por la que se autoriza al consorcio ballenero a instalar una estación terrestre en Puerto Morín.—10 de agosto de 1962 (Ministerial resolution No. 4038 authorizing the whaling consortium to set up a shore station at Puerto Morín.—10 August 1962)

# MISCELLANEOUS AND AUXILIARIES

**Peru. Laws, Statutes, etc. (1962)** M  
8-11437  
*Peruano*, (6426) : 2 p.

Resolución ministerial No. 4209 por la que se otorga licencia provisional para una fábrica de harina de pescado en Supe.—13 de agosto de 1962 (Ministerial resolution No. 4209 granting a provisional licence for a fish meal plant at Supe.—13 August 1962)

With a producing capacity of 12 tons of meal per hour.

**Peru. Laws, Statutes, etc. (1962)** M  
8-11438  
*Peruano*, (6416) : 2 p.

Resolución ministerial No. 4208 por la que se otorga licencia provisional para una fábrica de harina de pescado en Tambo de Mora.—13 de agosto de 1962 (Ministerial resolution No. 4208 granting a provisional licence for a fish meal plant at Tambo de Mora.—13 August 1962)

With a producing capacity of 6 tons of meal per hour.

**Peru. Laws, Statutes, etc. (1962)** M  
8-11439  
*Peruano*, (6404) : 2 p.

Resolución suprema No. 150-DAP por la que se confirma la tasa e la harina de pescado o similares que se embarque por los muelles fiscales.—20 de agosto de 1962 (Supreme resolution No. 150-DAP confirming the tax on fish meal and similar products embarked from government owned wharves.—20 August 1962)

20 soles (gold) per ton.

**Peru. Laws, Statutes, etc. (1962)** M  
8-11440  
*Peruano*, (6400) : 1 p.

Decreto ley No. 14195 por el que se establecen disposiciones referentes a la inscripción y funcionamiento de las fábricas de harina de pescado.—28 de agosto de 1962 (Decree law No. 14195 laying down provisions relative to the registration and operation of fish meal plants.—28 August 1962)

Detailed provisions designed to expedite formalities.

**Peru. Laws, Statutes, etc. (1962)** M  
8-11441  
*Peruano*, (6414) : 3 p.

Resolución ministerial No. 1163 por el que se establecen requisitos para el otorgamiento de licencias de instalación de fábricas de harina de pescado.—4 de septiembre de 1962 (Ministerial resolution No. 1163 laying down requirements for the granting of licences for fish meal plants.—4 September 1962)

Provisions made under the various acts and decrees governing the subject.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

- MF  
8-11442
- New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz. N.S.W.*, (79) : 2465  
 Amendment of a new regulation made under the fisheries and oyster farms act, 1935-1960.—15 August 1962

Insertion of a new regulation (No. 160) to restrict the taking of Murray cod and golden perch (callop or yellowbelly).

- MF  
8-11443
- New South Wales. Laws, Statutes, etc. (1962)**  
*Govt Gaz., N.S.W.*, (100) : 2997-3003  
 Amendment of regulations made under the radioactive substances act, 1957.—19 October 1962

Relates to protection of water against pollution by radioactive wastes.

- MF  
8-11444
- Queensland. Laws, Statutes, etc. (1962)**  
*Qd Govt Gaz.*, 211 (11) : 284  
 Order in council, made under the fisheries acts, 1957 to 1959.—20 September 1962

Prohibits the taking of fish by any net in the waters specified, except the taking of herrings, hardiheads, or prawns by means of a cast or "umbrella" net.

- MF  
8-11445
- Western Australia. Laws, Statutes, etc. (1962)**  
*Govt Gaz., W. Aust.*, (65) : 2272  
 Proclamation F.D. 181/62, Ex. Co. No. 1599 made under the fisheries act, 1905-1961.—10 August 1962

Prohibits the taking of prawns by means of 'trawl nets', in the waters specified, from 1 Jan. to 30 Dec. in every year.

- MF  
8-11446
- Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (19) : 1039  
 SOR/62-365. Order in council P.C. 1962-1034, amending the British Columbia fishery regulations made under the fisheries act.—19 September 1962

Revokes provision respecting salmon fishing in part of the Fraser River.

- MF  
8-11447
- Canada. Laws, Statutes, etc. (1962)**  
*Can. Gaz. (II)*, (19) : 1087  
 DORS/62-365. Décret C.P. 1962-1034, modifiant le règlement de pêche de la Colombie-Britannique en vertu de la loi sur les pêcheries.—19 septembre 1962 (SOR/62-365. Order in council P.C. 1962-1034, amending the British Columbia fishery regulations made under the fisheries act.—19 September 1962)

*Fr* 8-11446.



**Canada. Laws, Statutes, etc. (1962)** MF  
8-11448  
*Can. Gaz. (II)*, (19) : 1047

SOR/62-369. Order in council P.C. 1962-1344, amending the Ontario fishery regulations made under the fisheries act.—27 September 1962

Adds a section providing that any fishing quota fixed by the regulations may be varied by order of minister of lands and forests and a section respecting trout fishing in Lake Superior.

**Canada. Laws, Statutes, etc. (1962)** MF  
8-11449  
*Can. Gaz. (II)*, (19) : 1096

DORS/62-369. Décret C.P. 1962-1344 modifiant le règlement de pêche de l'Ontario en vertu de la loi sur les pêcheries.—27 septembre 1962 (SOR/62-369. Order in council P.C. 1962-1344, amending the Ontario fishery regulations made under the fisheries act.—27 September 1962)

*Fr* 8-11448.

**Newfoundland. Laws, Statutes, etc. (1962)** MF  
8-11450  
*Statut. Newfoundld*, 1961-1962, (1-82) : 260-1

No. 45. The supply act, 1962: an act for granting to Her Majesty certain sums of money for defraying certain expenses of the public service for the financial year ending the thirty-first of March 1963 and for the other purposes relating to the public service.—20 March 1962

Includes appropriations for agriculture and fisheries.

**Ontario. Laws, Statutes, etc. (1961)** MF  
8-11451  
*Statut. Ont.*, 10-11 Elizabeth II, 1961-1962, Chap. 45, 161

The fish inspection amendment act, 1961-62: an act to amend the fish inspection act.—15 December 1961

Expands section 13 on power of lieutenant governor in council to make regulations.

**Ontario. Laws, Statutes, etc. (1962)** MF  
8-11452  
*Statut. Ont.*, 10-11 Elizabeth II, 1961-1962, Chap. 48, 167-91  
The game and fish act, 1961-62.—30 March 1962

Detailed provisions, including regulations on traffic in certain fish, fishing nets, setting apart of waters for the propagation of fish, and fishing rights.

**Ontario. Laws, Statutes, etc. (1962)** MF  
8-11453  
*Statut. Ont.*, 10-11 Elizabeth II, 1961-1962, Chap. 99, 593-601

The Ontario water resources commission amendment act, 1961-62: an act to amend the Ontario water resources commission act.—30 March 1962

Numerous amendments regarding municipal powers, prohibition of discharge of polluting material, regulation of addition of substances to water, sewage works, etc.

- Finland. Laws, Statutes, etc. (1962)** MF  
8-11454  
*Finl. FörfattnSaml.*, (282-9) : 541-56  
N:o 282. Vattenförfordning.—6 april 1962 (Decree No. 282: waters decree.—6 April 1962). *Sv*

Made under the waters act of 1961. Contains provisions in respect of water pollution.

- Finland. Laws, Statutes, etc. (1962)** MF  
8-11455  
*Finl. FörfattnSaml.*, (282-9) : 557-9  
Förordning N:o 283 om förhandsatgärder för skydd av vatten.—6 april 1962 (Decree No. 283 concerning prior measures to be taken for the protection of water.—6 April 1962). *Sv*

Made under the waters act of 1961. Control of pollution by certain objectionable establishments.

- France. Laws, Statutes, etc. (1962)** MF  
8-11456  
*J. off. Répub. franç.*, (50) : 2020-57  
Décret n° 62-214 du 28 février 1962 modifiant les tarifs des droits de douane d'importation et le tarif des droits de douane d'exportation (Decree No. 62-214, amending the import and export duty tariffs.—28 February 1962)

Extensive amendments, also covering fish and fish products.

- France. Laws, Statutes, etc. (1962)** MF  
8-11457  
*J. off. Répub. franç.*, (62) : 2751-2  
Arrêté du 2 mars 1962 fixant les mesures spéciales de protection pour le saumon (Order laying down special measures for the protection of salmon.—2 March 1962)

Prohibits taking salmon and, where applicable, trout in certain waters.

- France. Laws, Statutes, etc. (1962)** MF  
8-11458  
*J. off. Répub. franç.*, (71) : 3174-87  
Arrêté du 7 mars 1962 relatif à la nomenclature, aux conditions d'installation et de conservation des médicaments, objets de pansement, appareils, matériel médical, ustensiles, désinfectants, à embarquer sur les navires de commerce, de pêche et de plaisance (Order relative to the nomenclature and conditions of installation and preservation of medicines, bandages, equipment, medical material, utensils and disinfectants to be carried aboard freight, fishing and pleasure craft.—7 March 1962)

- Germany, Eastern. Laws, Statutes, etc. (1962)** MF  
8-11459  
*GesBl. dtsh. dem. Repub.* (2), (71) : 635-6  
Fünfte Durchführungsbestimmung zum Gesetz über die Versicherung der volkseigenen Betriebe.—19. September 1962 (Fifth ordinance implementing the act relative to the insurance of the people's concerns.—19 September 1962)

Including fishery concerns.

**Germany. Federal Republic. Laws, Statutes, etc. (1962)**  
*MinistBl. Germ. fed. Rep.*, (18) : 262

MF  
 8-11460

Bekanntmachung. Änderung der Richtlinien für die Gewährung einer Preishilfe für Gasöl für die Grosse Herings, Grosse Hochsee, Kleine Hochsee-, Küsten- und Binnenfischerei. Vom. 10. August 1962 (Notice relating to amendment of the directives for the granting of a price subsidy for fuel for high seas fisheries, large-scale herring fisheries, small-scale high seas fisheries, and coastal and inland fisheries.—10 August 1962)

Miscellaneous amendments to directives of 4 May 1962.

**Germany. Federal Republic. Laws, Statutes, etc. (1962)**  
*MinistBl. Germ. fed. Rep.*, (20) : 294-7

MF  
 8-11461

Gesetz zu dem Überinkommen Nr. 112 der Internationalen Arbeitsorganisation vom 19. Juni 1959 über das Mindestalter für die Zulassung zur Arbeit in der Fischerei.—24. September 1962 (Act relative to convention No. 112 of the International Labour Organization concerning the minimum age for admission to employment as fishermen.—24 September 1962)

Ratification of convention adopted at Geneva on 19 Jun. 1959.

**Madagascar. Laws, Statutes, etc. (1962)**  
*J. off. Répub. malgache*, (Spec. 248) : 2265

MF  
 8-11462

Ordonnance N° 62-085 portant modification de l'ordonnance n° 60-128 du 3 octobre 1960 fixant la procédure applicable à la répression des infractions à la législation forestière, de la chasse, de la pêche et de la protection de la nature.—29 septembre 1962 (Ordinance No. 62-085 amending ordinance No. 60-128, of 3 October 1960, fixing the procedure applicable for the penalization of violations of legislation relative to hunting, fishing and protection of nature.—29 September 1962)

Ci 61-05843. Various administrative amendments.

**Malaya, Federation of. Laws, Statutes, etc. (1962)**  
*Fed. Malaya Gaz.*, (18), (Leg. Suppl. 41) : 277-8

MF  
 8-11463

L.N. 221. Prohibition of set barrier fishing gear (Perak) rules, 1962, made under the fisheries enactment, 1937.—28 July 1962

Prohibits in the tidal waters of the State of Perak the use of fishing gear consisting of a screen of nettings or any other description of material supported at intervals by poles.

**Norway. Laws, Statutes, etc. (1962)**  
*Norsk Lovtid.*, (5) : 49

MF  
 8-11464

Bestemmelse om utvidelse av maskevidden i trål.—26. januar 1962 (Notice concerning an increase in fish net meshes.—26 January 1962). No

In respect of nets of polyethylene.

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- Norway. Laws, Statutes, etc. (1962)** MF  
8-11465  
*Norsk Lovtid.*, (5) : 50

Bestemmelse om merking av bundne redskaper til lakse-eller sjøaurefiske i Vardø fiskeridistrikt.—29. januar 1962 (Notice concerning the marking of fixed installations for salmon or sea-trout fishing in the Vardø fishing district.—29 January 1962). *No*

- Norway. Laws, Statutes, etc. (1962)** MF  
8-11466  
*Norsk Lovtid.*, (12) : 198

Resolusjon om bestemmelser om snurpenotfisket etter størje.—23. mars 1962 (Resolution containing provisions concerning slip-net sturgeon fishing.—23 March 1962). *No*

In respect of rights of catch.

- Norway. Laws, Statutes, etc. (1962)** MF  
8-11467  
*Norsk Lovtid.*, (23) : 439

Lov Nr. 1 om opphevelse av Fisketiendefondet.—15. juni 1962 (Act No. 1, abolishing the fishing titles fund.—15 June 1962). *No*

Repeals acts of 20 Sep. 1845, 5 Aug. 1848, 27 Dec. 1862 and 4 May 1872 concerning payment of fishing titles.

- Norway. Laws, Statutes, etc. (1962)** MF  
8-11468  
*Norsk Lovtid.*, (23) : 440-2

Bestemmelse om utførsel og betaling av eksportfrilistevarer.—15. juni 1962 (Provisions concerning the export and payment of products on the free export list.—15 June 1962). *No*

Covers fish and fish products.

- Peru. Laws, Statutes, etc. (1962)** MF  
8-11469  
*Peruano*, (6333) : 1 p.

Resolución ministerial No. 2362 por la que se amplía a 30 días el plazo para tramitación de certificados de departamento de tecnología pesquera.—22 de mayo de 1962 (Ministerial resolution No. 2362 extending to 30 days the period allowed for the procedure for obtaining certificates from the department of fisheries and technology.—22 May 1962)

Refers to certificates provided for in ministerial resolution No. 1470 of 6 Apr. 1962.

- Peru. Laws, Statutes, etc. (1962)** MF  
8-11470  
*Peruano*, (6351) : 2 p.

Resolución ministerial No. 2426 por la que se revalida licencia provisional para fabrica de harina de pescado en la Caleta de Végueta.—28 de mayo de 1962 (Ministerial resolution No. 2426 revalidating a provisional licence for a fish meal plant in the Caleta de Végueta.—28 May 1962)



**Peru. Laws, Statutes, etc. (1962)**

MF  
8-11471

*Peruano*, (6340) : 2 p.

Resolución ministerial No. 2562, por la que se otorga una licencia provisional para fábrica de harina de pescado en Chancay.—4 de junio de 1962 (Ministerial resolution No. 2562 granting a provisional licence for a fish meal plant at Chancay.—4 June 1962)

Capacity 4 tons per hour.

**Peru. Laws, Statutes, etc. (1962)**

MF  
8-11472

*Peruano*, (6352) : 2 p.

Resolución suprema No. 286 por la que se otorga una licencia definitiva a la Industria Conservera Alimenticia para producir harina de pescado.—9 de junio de 1962 (Supreme resolution No. 286 granting a permanent licence to the Industria Conservera Alimenticia for the production of fish meal.—9 June 1962)

**Portugal. Laws, Statutes, etc. (1962)**

MF  
8-11473

*Diário do Gov.*, Lisboa, 1 (144) : 873-8

Decreto-lei n.º 44 418: fixa os direitos de importação a aplicar, a partir de 6 de maio de 1962, a determinadas mercadorias quando originárias dos países que beneficiam da cláusula de nação mais favorecida.—26 de junho de 1962 (Decree law No. 44 418 fixing the import duties to be applied with effect from 6 May 1962 to certain goods imported from countries benefiting from the most favoured nation clause.—26 June 1962). *Pr*

Includes fish and fish products.

**Sweden. Laws, Statutes, etc. (1962)**

MF  
8-11474

*Svensk FörfSaml.*, (126-8) : 303

Kungl. Maj:ts förordning Nr 126 angående fortsatt giltighet av förordning den 30 maj 1952 (nr 320) om viss reglering av handeln med fisk, m.m.—27 april 1962 (Royal decree No. 126, extending the validity of decree No. 320 of 30 May 1952, regulating trade in fish, etc.—27 April 1962). *Sv*

Until 30 Jun. 1963.

**Sweden. Laws, Statutes, etc. (1962)**

MF  
8-11475

*Svensk FörfSaml.*, (126-8) : 303-4

Kungl. Maj:ts förordning/Nr 127 om fortsatt giltighet av förordningen den 5 juni 1953 (nr 372) angående reglering av införseln av vissa slag av fisk och skaldjur.—27 april 1962 (Royal decree No. 127, extending the validity of decree No. 372 of 5 June 1953, regulating the importation of certain species of fish and crustaceans.—27 April 1962). *Sv*

Until 30 Jun. 1963.

**Sweden. Laws, Statutes, etc. (1962)**MF  
8-11476*Svensk FörfSaml.*, (126-8) : 304

Kungl. Maj:ts förordning Nr 128 om fortsatt giltighet av förordningen den 5 juni 1953 (nr 374) angående reglering av utförseln av vissa slag av fisk och skaldjur m.m.—27 april 1962 (Royal decree No. 128, extending the validity of decree No. 374 of 5 June 1953, regulating the exportation of certain species of fish and crustaceans, etc.—27 April 1962). *Sv*

Until 30 Jun. 1963.

**Switzerland. Laws, Statutes, etc. (1962)**MF  
8-11477*Rec. Lois féd.*, Berne, (40) : 1230-56

Ordonnance N° 6 concernant l'Association européenne de libre-échange (ordonnance AELE N° 6).—5 octobre 1962 (ordinance No. 6 relative to the European Free Trade Association (ordinance EFTA No. 6).—5 October 1962)

Covers fish and fish products.

**Turkey. Laws, Statutes, etc. (1962)**MF  
8-11478*Resmî Gaz.*, (11085) : 7142

Bahk avciliğinin tanzimine dair 11 numarah sirküler (Circular No. 11 of the ministry of trade, regulating fishing.—Undated). *Tü*

Provides for closed seasons during the period 15 April 1962–15 April 1963.

**U.K. Laws, Statutes, etc. (1962)**MF  
8-11479*Statut. Instrum. U.K.*, (1669) : 2 p.

The salmon and migratory trout (prohibition of drift-net fishing) order 1962.—4 July 1962

Prohibition from 15 Sep. 1962 to 15 Feb. 1965 off the coast of Scotland and the Tweed.

**Brun, B. (1963)**MF  
8-11480*C.R. Acad. Sci.*, Paris, 256 (13) : 2934-5

Sur les gammares du groupe *G. locusta* des eaux marines et saumâtres du littoral provençal (On the sand flies of the group *G. locusta* in the marine and brackish waters of the Provençal coast)

Preliminary note; three forms of the group *locusta*, different from the forms identified on the Atlantic coast, are discussed.

**Legrand, J.-J. & P. Juchault** (1963)

MF

*C.R. Acad. Sci., Paris*, 256 (13) : 2931-3

8-11481

Mise en évidence d'un hermaphrodisme protogynique fonctionnel chez l'isopode anthuridé *Cyathura carinata* (Kröyer) et étude du mécanisme de l'inversion sexuelle (Demonstration of a functional protogynic hermaphroditism in the anthurid isopod *Cyathura carinata* (Kröyer) and study of the mechanism of the sexual inversion)

Preliminary account of observations on material collected from the French Atlantic and Mediterranean coasts.

**New South Wales. Laws, Statutes, etc.** (1962)

MF

*Govt Gaz., N.S.W.*, (115) : 3371

8-11482

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of waters of Richmond River, county of Rous.—31 October 1962

Prohibits the taking of fish by means of nets of every description, in the specified tidal waters, from 29 Oct. 1962 to 28 Oct. 1967.

**Queensland. Laws, Statutes, etc.** (1962)

MF

*Qd Statut.*, 1960-61, 9-10 Elizabeth II, Ed. 1962, 151-68

8-11483

No. 29. The pollution of waters by oil of 1960: an act relating to the prevention of the pollution of the territorial waters and inland navigable waters of Queensland by oil.—12 December 1960

**Canada. Laws, Statutes, etc.** (1962)

MF

*Can. Gaz. (II)*, (20) : 1125

8-11484

SOR/62-399. Prince Edward Island fish propagation order, made under the fisheries act.—26 September 1962

Concerns the area known as the 'Cooper bed' and part of Bideford River.

**Canada. Laws, Statutes, etc.** (1962)

MF

*Can. Gaz. (II)*, (20) : 1176

8-11485

DORS/62-399. Ordonnance relative à la propagation du poisson dans l'Île-du-Prince-Édouard, en vertu de la loi sur les pêcheries.—26 septembre 1962 (SOR/62-399. Prince Edward Island fish propagation order, made under the fisheries act.—26 September 1962)

*Fr* 8-11484.

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MF  
8-11486

*Can. Gaz. (II)*, (23) : 1239-40

SOR/62-452. Order in council P.C. 1962-1651 amending the fish inspection regulations made under the fish inspection act.—22 November 1962

Amendments in respect of powers of inspectors, disposition of fish that are considered to be unsuitable for sale, use of the designations 'Canada inspected' and 'processed under government supervision'. A paragraph is added to section 60 to the effect that fish sticks shall not be prepared from comminuted fish flesh.

## Canada. Laws, Statutes, etc. (1962)

MF  
8-11487

*Can. Gaz. (II)*, (23) : 1295-6

DORS/62-452. Décret C.P. 1962-1651 modifiant le règlement sur l'inspection du poisson en vertu de la loi sur l'inspection du poisson.—22 novembre 1962 (SOR/62-452. Order in council P.C. 1962-1651 amending the fish inspection regulations made under the fish inspection act.—22 November 1962)

*Fr* 8-11486.

## Chile. Laws, Statutes, etc. (1962)

MF  
8-11488

*Diario ofic., Santiago*, (25.350) : 2502

Decreto Núm. 415 por el que se autoriza a la sociedad Alsina y Pita, Compañía Industrial Pesquera Antofagasta (CIPA) para instalar una fábrica de harina y aceite de pescado y de conservas en Tocopilla.—2 de agosto de 1962 (Decree No. 415 authorizing the Sociedad Alsina y Pita, Compañía Industrial Pesquera Antofagasta (CIPA) to set up a fish meal and oil conserves plant at Tocopilla.—2 August 1962)

## Denmark. Laws, Statutes, etc. (1962)

MF  
8-11489

*Lovtidende A*, (22) : 884-7

Bekendtgørelse Nr. 282 om udførsel af fisk og fiskevarer.—8. august 1962 (Notification No. 282, concerning the export of fish and fisheries products.—8 August 1962). *Da*

Ci 60-5806. Repeals and replaces notification No. 280 of 2 Sep. 1959.

## Finland. Laws, Statutes, etc. (1962)

MF  
8-11490

*Finl. FörfattnSaml.*, (39-54) : 89

Lag N:o 39 om användning av medel, som influtit av vissa laxtjenden.—12 januari 1962 (Act No. 39, concerning the utilization of certain salmon fishing titles.—12 January 1962). *Sv*

Concerns joint salmon fishing practised by Finland and Sweden in the Tornio and Muonio Rivers. Titles formerly distributed among clergymen of areas concerned; now to be divided among owners of the water.



**Switzerland. Laws, Statutes, etc. (1961)** MF  
8-11491

*Rec. Lois. féd., Berne, (48) : 1517-20*

Accord commercial du 2 décembre 1961 entre la Confédération Suisse et la République Tunisienne (Trade agreement between the Swiss Confederation and the Tunisian Republic.—2 December 1961)

Valid until 31 Dec. 1964. Imports from Tunisia include fresh and preserved fish, crustaceans.

**Sweden. Laws, Statutes, etc. (1962)** MF  
8-11492

*Svensk FörfSaml., (303-8) : 677-8*

Kungl. maj:ts Förordning Nr 308 om förhöjning av vissa livräntor på grund av statsunderstödd olycksfallsförsäkring för fiskare.—6 juni 1962 (Royal decree No. 308, increasing certain lifetime pensions based on the state subsidy for fishermen in case of accidents.—6 June 1962). *Sv*

**Portugal. Laws, Statutes, etc. (1962)** MF  
8-11493

*Bol. ofic. Cabo Verde, (39) : 879-80*

Decreto-lei n.º 44 523: organiza os serviços do instituto das indústrias de pesca de Angola e do fundo de apoio às indústrias de pesca.—18 de agosto de 1962 (Decree No. 44 523 organizing the services of the Angola fisheries industries institute and the fisheries institute support fund.—18 August 1962). *Sv*

Prescribes in an annex the establishment of said institute.

**Portugal. Laws, Statutes, etc. (1962)** MF  
8-11494

*Bol. ofic. Cabo Verde, (39) : 876-7*

Decreto-lei n.º 44 508: Designa as mercadorias provenientes das províncias ultramarinas que são livres, a partir de 1 de janeiro de 1963, de direitos aduaneiros de importação no continente e ilhas adjacentes.—14 de agosto de 1962 (Decree No. 44 508 specifying the goods from the overseas provinces which with effect from 1 January 1963 shall be free of customs import duties upon entry into continental Portugal and the adjacent islands.—14 August 1962). *Pr*

Includes fisheries products.

**Foyle Fisheries Commission (1962?)** MF  
8-11495

*Rep. Foyle Fish. Comm., 10 : 47 p.*

Includes a general account of the commission, activities of the advisory council, staff and finances. Describes 'conservancy', state of the fishery, rainfall and river conditions, netting, angling, research work, predator control, hatchery and restocking, drainage, engineering works, water pollution and enforcement. Describes 'management' (Londonderry fishery, licences, and permits, catch statistics, rod returns). All with respect to *Salmo salar*. Appendices include trading accounts, list of staff and licence distributors, abstracts of regulations as well as a geographical illustration of catches in the river Foyle, 1960-61 and three separately signed articles: Notes on experimental fishing in the river Foyle during the period 1 Sep. to 19 Dec. 1960 by Cummins, N. P.; Notes on conditions affecting salmon fishing and the runs of fish in the river Foyle during 1955 and 1959 by Cummins, N. P.; Investigation into the Mourne stocks of salmon, 1961 by Vickers, K. U.

**IPSFC (1962)**

MF

8-11496

*Rep. int. Pacif. Salm. Fish. Comm.*, 1961 : 43 p.

Report of the Commission's meetings, recommendations for regulations governing the fisheries for sockeye and pink salmon, in 1961, account of the conditions of the fisheries in this year, with statistics of catch and escapement.

**Ireland. Inland Fisheries Trust**

MF

8-11497

Dublin, 19 p.

Angling development and exploitation

A popular written handbook with specific reference to Ireland discussing: basic requirements, types of angling, species of game and coarse fish, sea angling, exploitation and publicities.

**Howe, H. V. (1962)**

MF

8-11498

366 p.

Ostracod taxonomy

A reference book for ostracod workers, both paleontologists and neontologists. A complete guide to all major classifications of Ostracoda. Contains 1936 entries and extensive bibliography.

**Finland. Laws, Statutes, etc. (1962)**

MF

8-11499

*Finl. FörfattnSaml.*, (89-93) : 159-60

Statsrådets beslut N:o 93 om en delegation för vattenskydd.—25 januari 1962 (Resolution No. 93 of the council of state, concerning the water protection commission.—25 January 1962). *Sv*

Ci 60-1327. Creates commission for the protection of sea and inland waters; repeals and replaces order No. 433 of 16 Oct. 1958 as amended by order No. 162 of 25 Mar. 1959, creating a temporary commission.

**Finland. Laws, Statutes, etc. (1962)**

MF

8-11500

*Finl. FörfattnSaml.*, (222-7) : 428

Lantbruksministeriets beslut N:o 227 om förbud mot fiske i vissa vatten.—13 mars 1962 (Resolution No. 227, prohibiting fishing in certain waters.—13 March 1962). *Sv*

Until 1966.

**Finland. Laws, Statutes, etc. (1962)**

MF

8-11501

*Finl. FörfattnSaml.*, (363-7) : 716

Lantbruksministeriets beslut N:o 367 angående ändring av lantbruksministeriets beslut om inskränkning av fisket i vissa vatten.—28 juni 1962 (Resolution No. 367, amending the resolution restricting fishing in certain waters.—28 June 1962). *Sv*

Minor amendment to resolution of 3 Jul. 1961, in respect of fishing methods.

- France. Laws, Statutes, etc. (1962)** MF  
8-11502  
*J. off. Répub. franç.*, (169) : 7128  
Décret n° 62-813 du 16 juillet 1962 portant règlement d'administration publique pour l'application de l'article 439-2 du code rural (Decree No. 62-813, issuing regulations for the application of art. 439-2 of the rural code.—16 July 1962)

Penalties for sale of illicitly-taken fish.

- Finland. Laws, Statutes, etc. (1962)** MF  
8-11503  
*Finl. FörfattnSaml.*, (399-410) : 812  
Förordning N:o 405 ändring av förordningen angående verkställighet och tillämpning av lagen om fiske.—27 juli 1962 (Decree No. 405, amending the decree providing for implementation of the fishing act.—27 July 1962). *Sv*

Minor amendment on taxes.

- France. Laws, Statutes, etc. (1962)** MF  
8-11504  
*J. off. Répub. franç.*, (200) : 8378  
Arrêté du 18 août 1962 portant institution et fixant la composition d'un comité consultatif de la distribution des produits de la mer et d'eau douce aux stades de gros, demi-gros et détail (Order creating and establishing the composition of an advisory committee in the wholesale, semi-wholesale and retail distribution of marine and freshwater products.—18 August 1962)

Prescribes composition and functions of said committee, which is established within the secretariat of state for internal trade.

- Gabon. Laws, Statutes, etc. (1962)** MF  
8-11505  
*J. off. Rép. gabon.*, (26) : 803-4  
Loi n° 22/62 du 26 octobre 1962 ratifiant l'accord de coopération entre l'état d'Israël et la République Gabonaise signé le 15 mai 1962 (Act No. 22/62 ratifying the agreement on technical co-operation between the state of Israel and the republic of Gabon.—26 October 1962)

Technical assistance and trade agreement. Imports include canned fish.

- Guatemala. Laws, Statutes, etc. (1962)** MF  
8-11506  
*Guatemalteco*, (53) : 625-6  
Reglamento para la aplicación de la ley sobre explotación en forma racional, de los recursos pesqueros del país.—16 de agosto de 1962 (Regulations for the application of the act on the rational exploitation of the fishing resources of the country.—16 August 1962)

Detailed provisions concerning the granting of commercial fishing licences, the maximum number of fishing craft authorized to fish certain species, inspection, etc.

- MF  
8-11507
- Kerala. Laws, Statutes, etc.** (1962)  
*Kerala Gaz.*, (45) Pt. 1 Suppl. : G3791  
 Notification G.O. (MS) No. 594 relating to Kerala fisheries service special rules.—3 November 1962

Establishes the categories of officers composing the service, their recruitment, promotions, etc.

- MF  
8-11508
- Ireland. Laws, Statutes, etc.** (1962)  
*Statut. Instrum. Ire.*, (39) : 2 p.  
 Live fish (restriction on import) order, 1962.—2 March 1962

Prohibits the importation of live fish (except those specified) and the eggs or young of such fish, save under licence.

- MF  
8-11509
- Ireland. Laws, Statutes, etc.** (1962)  
*Iris Oifigiúil*, (77) : 1138-9  
 Castlemaine harbour mussel fisheries bye-laws No. 510, 1962, made under the fisheries (consolidation) act, 1959.—14 September 1962

Prescribed closed seasons and closed areas.

- MF  
8-11510
- Ireland. Laws, Statutes, etc.** (1962)  
*Statut. Instrum. Ire.*, (216) : 1 p.  
 Fisheries (amendment) act, 1962 (commencement) order, 1962.—20 December 1962

Fixes 1 Jan. 1963 and 1 Mar. 1963 as the dates on which the specified provisions of the fisheries (amendment) act, 1962, come into operation.

- MF  
8-11511
- Italy. Laws, Statutes, etc.** (1962)  
*Gazz. uff. Repub. ital.*, (202) : Suppl. 1 : 4, 108

Decreto del presidente della repubblica 1° agosto 1962, n. 1118. Modificazione del regime daziario di alcuni prodotti in relazione ad analoghe variazioni intervenute nella tariffa doganale comune della Comunità Economica Europea (Presidential decree No. 1118, modifying customs status of certain products, in relation to similar modifications in the common customs tariff of the European Economic Community.—1 August 1962)

- MF  
8-11512
- Jordan. Laws, Statutes, etc.** (1962)  
*Off. Gaz. Jordan*, (1636) : 1019

List of prices for the purchase and sale of fish

Concerns about fifty varieties.



MF  
8-11513

**Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)**  
*J. off. Répub. Maurit.*, (82-83) : 194-204

Décret n° 62.028 réorganisant le cadre de l'élevage, des pêches maritimes et des industries animales.—17 janvier 1962 (Decree No. 62.028 reorganizing the stockbreeding, sea fisheries and animal industries staff establishment.—17 January 1962)

Detailed provision repealing and replacing orders Nos. 5002 and 5006 of 21 Mar. 1959.

MF  
8-11514

**Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)**  
*J. off. Répub. Maurit.*, (87-88) : 291-5

Décret n° 62.078 fixant les modalités d'application des mesures d'exonération des droits et taxes à l'entrée prévues par la loi n° 61.122 du 26 juin 1961 déterminant le régime des investissements privés en Mauritanie.—20 mars 1962 (Decree No. 62.078 laying down the terms for the application of the exemption measures in respect of import duties and taxes provided for in act No. 61.122 of 26 June 1961 determining the private investment system in Mauritania.—20 March 1962)

Exemptions apply to various products including fish and fishing equipment.

MF  
8-11515

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6348) : 3 p.

Resolución ministerial No. 2756 por la que se prohíbe el uso de redes agalleras en los ríos Ilave y Ramis.—15 de junio de 1962 (Ministerial resolution No. 2746 forbidding the use of gill fishing nets in the Ilave and Ramis.—15 June 1962)

Until 15 Aug. 1963.

MF  
8-11516

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6409) : 2 p.

Decreto ley No. 14192 por el que se fijan sueldos y salarios mínimos en todas las actividades económicas.—21 de agosto de 1962 (Decree law No. 14192 fixing minimum salaries and wages in all branches of economic activity.—21 August 1962)

Figures are given in respect of the various provinces.

MF  
8-11517

**Peru. Laws, Statutes, etc. (1962)**  
*Peruano*, (6466) : 2 p.

Resolución ministerial No. 5315 por la que se autoriza al servicio de pesquería para hacer instalaciones de agua en la planta piloto de Máncora.—20 de octubre de 1962 (Ministerial resolution No. 5315 authorizing the fisheries service to provide water facilities in the Mancora pilot plant.—20 October 1962)

The Mancora pilot plant is for the salting, drying and smoking of fish.

**Philippines. Laws, Statutes, etc. (1962)**MF  
8-11518*Off. Gaz., Manila*, (39) : 6222

Provincial circular relating to cooperation of municipal and city police agencies in the present drive against rampant illegal fishing activities in Philippines waters.—29 August 1962

Particularly against the use of dynamite or explosives, detrimental not only to the aquatic resources of the nation, but also to the increased production of fish.

**Philippines. Laws, Statutes, etc. (1962)**MF  
8-11519*Off. Gaz., Manila*, (39) : 6213-5

Executive order No. 18 intensifying the national food production campaign.—30 August 1962 (Establishes the national food production campaign committee, in view to the recurring shortage of foods, including fish)

**Poland. Laws, Statutes, etc. (1962)**MF  
8-11520*Dziennik Ustaw*, (52); Text 252 : 435-7

Rozporządzenie rady ministrów z dnia 24 września 1962 r. w sprawie zasad określania wysokości kar pieniężnych za zanieczyszczenie wody i trybu ich ściągania (Order relative to the amount of fines payable for water pollution, and the manner of collecting such fines.—24 September 1962)

Made under the water act of 30 May 1962.

**New South Wales. Laws, Statutes, etc. (1962)**MF  
8-11521*Govt Gaz., N.S.W.*, (72) : 2238

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of the waters of Brunswick River and adjacent waters of the South Pacific Ocean, County of Rous.—18 July 1962

Prohibits in the described waters the taking of fish by means of nets of every description with the exception of the bait net prescribed by regulation 26B, for a period of five years.

**New South Wales. Laws, Statutes, etc. (1962)**F  
8-11522*Govt Gaz., N.S.W.*, (79) : 2464

Amendment of regulations made under the fisheries and oyster farms act, 1935-1960.—15 August 1962

Various minor amendments of regulation 13 respecting fishing in inland waters.

**New South Wales. Laws, Statutes, etc. (1962)**F  
8-11523*Govt Gaz., N.S.W.*, (84) : 2612

Proclamation made under the fisheries and oyster farms act, 1935-1960, relating to portions of the Hunter River, counties of Brisbane, Durham, Hunter and Northumberland.—22 August, 1962

Prohibits, in the prescribed waters, the taking of fish by otter trawl nets of every description, from 1 Sep. 1962 to 31 Aug. 1967.

# MISCELLANEOUS AND AUXILIARIES

## **New South Wales. Laws, Statutes, etc. (1962)**

F

8-11524

*Govt Gaz. N.S.W.*, (84) : 2612

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the inland waters of Murray River in the vicinity of Mildura, county of Wentworth.—22 August 1962

Prohibits, in the prescribed waters, the taking of fish by all methods other than a single rod and line or handline with the number of hooks specified, from 28 Aug. 1962 to 27 Aug. 1967.

## **New South Wales. Laws, Statutes, etc. (1962)**

F

8-11525

*Govt Gaz., N.S.W.*, (94) : 2808-9

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Darkum Creek and Woolgooga and Hearne's Lakes, county of Fitzroy.—12 September 1962

Prohibits, in the specified waters the taking of fish by nets of every description other than a 20 ft. hand-hauled net and the prescribed dip or scoop net for the capture of prawns only, from 28 Nov. 1962 to 27 Nov. 1967.

## **New South Wales. Laws, Statutes, etc. (1962)**

F

8-11526

*Govt Gaz., N.S.W.*, (94) : 2809

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Lady Robinson's Beach, Botany Bay, county of Cumberland.—12 September 1962

Prohibits, in the prescribed waters, the taking of fish by nets of every description during week-ends and holidays, as specified in the schedule, during the years 1962 to 1966.

## **New South Wales. Laws, Statutes, etc. (1962)**

F

8-11527

*Govt Gaz., N.S.W.*, (96) : 2877

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of the waters of Nepean River and Hawkesbury River, counties of Cumberland, Camden and Cook.—19 September 1962

Prohibits, in the prescribed waters, the taking of fish by all methods, other than a single rod and line or handline with not more than two hooks attached, from 1 Jan. 1963 to 31 Dec. 1967.

## **New South Wales. Laws, Statutes, etc. (1962)**

F

8-11528

*Govt Gaz., N.S.W.*, (96) : 2878

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to portion of waters of Wakool River at Murray River junction, counties of Caira and Wakool.—19 September 1962

Prohibits, in the prescribed waters, the taking of fish by nets of every description, from 1 Jan. 1963 to 31 Dec. 1967.

**New South Wales. Laws, Statutes, etc. (1962)**F  
8-11529*Govt Gaz., N.S.W.*, (98) : 2936

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of canal lagoon of Berrara Creek, county of St. Vincent.—26 Sep. 1962

Prohibits, in the prescribed waters, the taking of fish by nets of every description other than the prescribed dip or scoop net and a 20 ft. hand-hauled net for the capture of prawns only, from 24 Dec. 1962 to 23 Dec. 1967.

**Canada. Laws, Statutes, etc. (1962)**F  
8-11530*Can. Gaz. (II)*, (18) : 1036-7

SOR/62-364. Alberta fish propagation order, pursuant to the fisheries act.—10 September 1962

The minister of lands and forests for the province of Alberta may set apart for the propagation of fish any of the waters described in the schedule.

**Canada. Laws, Statutes, etc. (1962)**F  
8-11531*Can. Gaz. (II)*, (18) : 1084-5

DORS/62-364. Ordonnance sur la propagation du poisson en Alberta, en vertu de la loi sur le pêcheries.—10 septembre 1962 (SOR/62-364. Alberta fish propagation order, pursuant to the fisheries act.—10 September 1962)

*Fr* 8-11530.

**Tchad, Republic of. Laws, Statutes, etc. (1961)**F  
8-11532*J. off. Tchad*, 120

Loi n° 5/61 instituant une taxe de circulation sur le poisson séché et fumé.—23 février 1961 (Act No. 5/61 establishing a sales tax on dried and smoked fish.—23 February 1961)

**Tchad, Republic of. Laws, Statutes, etc. (1961)**F  
8-11533*J. off. Tchad*, 121

Loi n° 7/61 instituant un droit de sortie sur les poissons séchés, fumés ou salés originaires de la république du Tchad.—23 février 1961 (Act No. 7/61 establishing an export tax on dried, smoked or salted fish originating in the republic of Tchad.—February 1961)

**Tchad, Republic of. Laws, Statutes, etc. (1961)**F  
8-11534*J. off. Tchad*, (22) : 790

Décret n° 133/FP. réglementant l'inspection des produits alimentaires d'origine animale autres que les viandes.—24 juillet 1961 (Decree No. 133/FP. regulating the inspection of foodstuffs of animal origin other than meat.—24 July 1961)



F  
8-11535

**Congo, Republic of, Laws, Statutes, etc. (1962)**  
*J. off. Congo*, (26) : 947-94

Décret n° 62-375 déterminant les conditions d'application de la loi n° 25-62 du 21 mai 1962 portant réglementation des établissements dangereux, insalubres et incommodes.—20 novembre 1962 (Decree No. 62-375 laying down conditions for the application of act No. 25-62, of 21 May 1962, regulating the operation of dangerous, unhealthful or objectionable establishments.—20 November 1962)

F  
8-11536

**Costa Rica. Laws, Statutes, etc. (1962)**  
*Gaceta, S. José*, (186) : 2509-11

Decreto No. 3.—Reglamento de la ley de conservación de la fauna silvestre No. 2790 de 20 de julio de 1961.—13 de agosto de 1962 (Decree No. 3 containing regulations under the forest wildlife conservation act (act No. 2790) of 20 July 1961.—13 August 1962)

Includes provisions on fishing licences.

F  
8-11537

**Finland. Laws, Statutes, etc. (1962)**  
*Finl. FörfattnSaml.*, (328-33) : 652

Lantbruksministeriets beslut N:o 333 om minimimått för gös i vissa vatten.—16 maj 1962 (Resolution No. 333, concerning the minimum size of pike-perch taken in certain waters.—16 May 1962). *Sv*

F  
8-11538

**Finland. Laws, Statutes, etc. (1962)**  
*Finl. FörfattnSaml.*, (363-7) : 715

Lantbruksministeriets beslut N:o 366 om förbud mot fiske i vissa vatten.—28 juni 1962 (Resolution No. 366 of the ministry of agriculture prohibiting fishing in certain waters.—28 June 1962). *Sv*

F  
8-11539

**Finland. Laws, Statutes, etc. (1962)**  
*Finl. FörfattnSaml.*, (368-9) : 747

Förordning N:o 369 om ändring av förordningen angående verkställighet och tillämpning av lagen om fiske.—29 juni 1962 (Decree No. 369, amending the decree providing for the application of the fishing act.—29 June 1962). *Sv*

Provisions of an administrative nature.

F  
8-11540

**France. Laws, Statutes, etc. (1962)**  
*J. off. Répub. franç.*, (149) : 6174

Arrêté du 6 juin 1962 fixant la composition des commissions spéciales consultatives pour la réglementation de la pêche dans les lacs du Bourget et d'Annecy (Order prescribing the composition of the special consultative commissions for the regulation of fishing in Le Bourget and Annecy Lakes.—6 June 1962)

F

**France. Laws, Statutes, etc. (1962)**

8-11541

*J. off. Répub. franç.*, (136) : 5565

Décret n° 62-654 du 8 juin modifiant les articles 3 et 6 du décret du 16 septembre 1958 relatif à la pêche fluviale (Decree No. 62-654, amending arts. 3 and 6 of the decree of 16 September 1958, relating to river fishing.—8 June 1962)

In respect of close seasons.

F

**France. Laws, Statutes, etc. (1962)**

8-11542

*J. off. Répub. franç.*, (143) : 5933

Arrêté du 8 juin 1962, fixant les conditions à remplir pour pêcher les dimanches et jours fériés dans les cours d'eau de deuxième catégorie en période d'interdiction générale (Order prescribing the conditions required for fishing on Sundays and holidays in second category watercourses during general closed seasons.—8 June 1962)

Amends decree 58-874 of 16 Sep. 1958 in respect of fishing methods.

F

**Rhodesia-Nyasaland, Federation of. Laws, Statutes, etc. (1962)**

8-11543

*Nyasaland Govt Gaz.*, (40) Suppl., 161-83

Mudi River waterworks ordinance, 1962 (ordinance No. 13 of 1962): An ordinance to provide for the administration and alteration of the Mudi River water-area and water board for the development and maintenance of waterworks in such water-area.—3 August 1962

Includes protection against water pollution.

F

**Rhodesia-Nyasaland, Federation of. Laws, Statutes, etc. (1962)**

8-11544

*Sth Rhod. Govt Gaz.*, (41) Act (21) : 99-101

Lake Kariba fish (levy) act, 1962: act to make provision for the imposition of a levy on fish obtained in lake Kariba and taken elsewhere in the colony for the purpose of trade or business

To remain in force until the expiration of the lake Kariba fishing (duties of excise) (authorization) act, 1962, of the federation.

F

**Rhodesia-Nyasaland, Federation of. Laws, Statutes, etc. (1962)**

8-11545

*Sth Rhod. Govt Gaz.*, (47) (Suppl. 421) : 1 p.

Southern Rhodesia proclamation No. 32 of 1962

Entry into force of the lake Kariba fish (levy) act, 1962, on 1 Oct. 1962.

F

**Tasmania. Laws, Statutes, etc. (1962)**

8-11546

*Statut. Rules Aust.*, (144) : 2 p.

Proclamation made under the fisheries act 1959.—31 July 1962

Declares the specified crown land reserves for the purpose of inland fishing.

**Tchad, Republic of. Laws, Statutes, etc. (1962)**

F  
8-11547

*J. off. Tchad*, (27) : 889

Décision n° 5/CGP.-CNP du 10 octobre 1962 portant création de vingt-quatre groupes de travail au comité national du plan (Decision No. 5/CGP.-CNP, creating twenty-four working groups within the national planning committee.—10 October 1962)

The rural economy and hydraulics section includes a working group for fisheries products.

**Chile. Laws, Statutes, etc. (1962)**

F  
8-11548

*Diario ofc.*, Santiago, (25.379) : 2312

Decreto Núm. 474 por el que se reglamenta el establecimiento de criaderos de la fauna continental dulceacuícola y fija las tarifas para la venta de productos provenientes de las estaciones de piscicultura administradas por el departamento de pesca y caza.—4 de septiembre de 1962 (Decree No. 474 regulating the establishment of continental sweet water fauna breeding stations and fixing the sales prices for products of the fishbreeding station managed by the department of fisheries and hunting.—4 September 1962)

The establishment of such breeding stations requires the authorization of the ministry of agriculture.

**Congo, Republic of. Laws, Statutes, etc. (1962)**

F  
8-11549

*J. off. Congo*, (11) : 433-5

Loi n° 25-62 du 21 mai 1962 portant réglementation des établissements dangereux, insalubres ou incommodes (Act No. 25-62 regulating the operation of dangerous, unhealthful or objectionable establishments.—21 May 1962)

The supervision of such establishments is also designed to protect fisheries.

**Congo, Republic of. Laws, Statutes, etc. (1962)**

F  
8-11550

*J. off. Congo*, (26) : 947-94

Décret n° 62-375 déterminant les conditions d'application de la loi n° 25-62 du 21 mai 1962 portant réglementation des établissements dangereux, insalubres et incommodes.—20 novembre 1962 (Decree No. 62-375 laying down conditions for the application of act No. 25-62 of 21 May 1962, regulating the operation of dangerous, unhealthy or objectionable establishments.—20 November 1962)

One of the purposes is to prevent water pollution.

F

**Colombia. Laws, Statutes, etc. (1962)**

8-11551

*Diario ofic., Bogota*, (30883) : 506

Resolución ejecutiva N° 212 de 16 de julio de 1962 por la cual se autoriza a la corporación autónoma regional de los Valles del Magdalena y del Sinú (CVM), para contratar un empréstito con el Banco Interamericano de Desarrollo, por las cantidades de US \$380.000.00 y \$3.300.000.00 (Executive resolution No. 212 authorizing the regional autonomous corporation of the valleys of Magdalena and Sinú to contract a loan with the Inter-American Development Bank for U.S. \$380,000 and 3.3 million Colombian pesos.—16 July 1962)

The loan to be used exclusively for research programmes concerning *inter alia* water resources and fisheries, within the overall regional development plan for the Sinu River Basin.

F

**Costa Rica. Laws, Statutes, etc. (1962)**

8-11552

*Gaceta, S. José*, (238) : 3373

Decreto N° 3043 de 17 de octubre de 1962 por el que se modifica el artículo 27 del decreto-ley N° 363 de 11 de enero de 1949 (reglamento a la ley sobre pesca y caza marítimas) (Legislative decree No. 3043, amending art. 27 of decree-law No. 363 of 11 January 1949 (regulations under the sea fishing and hunting act).—17 October 1962)

In respect of taxes on fishing craft, certain fishing operations, etc.

F

**Somalia. Laws, Statutes, etc. (1962)**

8-11553

*Boll. uff. Repub. somala*, (6) (Suppl. 3) : 3-18

Legge 3 giugno 1962, n. 14: ordinamento del governo (Law No. 14: organization of the government.—3 June 1962)

The ministry of agriculture and animal husbandry is responsible for fisheries.

F

**Rhodesia-Nyasaland, Federation of. Laws, Statutes, etc. (1962)**

8-11554

*Sth Rhod. Govt Gaz.*, (41), (Suppl. act No. 24) : 155-70

General law amendment act, 1962: act to amend various statutes of the colony and to repeal the governor's powers act, 1951.—Undated

Includes amendments of the fish conservation act, 1960.

F

**Finland. Laws, Statutes, etc. (1962)**

8-11555

*Finl FörfattnSaml.*, (399-410) : 810

Lag N:o 403 angående ändring av lagen om fiske.—27 juli 1962 (Act No. 403 amending the fishing act.—27 July 1962). *Sv*

In respect of a charge payable for fee receipts issued in connection with fisheries management.



**France. Laws, Statutes, etc. (1962)**

F  
8-11556

*J. off. Répub. franç.*, (186) : 7874

Décret du 2 août 1962 modifiant une réserve de pêche instituée par le décret n° 62-52 du 15 janvier 1962 (Decree modifying a fishing reserve created by decree No. 62-52 of 15 January 1962.—2 August 1962)

In respect of the Loire River.

**France. Laws, Statutes, etc. (1962)**

F  
8-11557

*J. off. Répub. franç.*, (200) : 8364

Décret n. 62-1000 du 18 août 1962 portant publication du protocole entre la France et l'Allemagne concernant la constitution d'une commission internationale pour la protection de la Sarre contre la pollution du 10 décembre 1961 (Decree No. 62-1000, publishing the protocol between France and Germany concerning the creation of an international commission for the protection of the Saar River against water pollution.—18 August 1962)

Protocol of 20 December 1961, entered into force on 1 July 1962.

**France. Laws, Statutes, etc. (1962)**

F  
8-11558

*J. off. Répub. franç.*, (201) : 8401-2

Décret n° 62-1006 du 18.8.62 portant publication du protocole entre la France, l'Allemagne et le Luxembourg concernant la constitution d'une commission internationale pour la protection de la Moselle contre la pollution, du 20 décembre 1961 (Decree No. 62-1006, publishing the protocol between France, Germany and Luxembourg concerning the creation of an international commission for the protection of the Moselle River against pollution, dated 20 December, 1961.—18 August 1962)

**Ireland. Laws, Statutes, etc. (1962)**

F  
8-11559

Act No. 31 of 1962, Separate publication : 16 p.

Fisheries amendment act, 1962: an act to amend the law relating to fisheries and for that purpose to amend and extend the fisheries (consolidation) act, 1959, and certain other enactments.—13 December 1962

Numerous amendments in respect of water pollution, artificial propagation of fish, qualifications of conservators, licences and penalties.

**Italy. Laws, Statutes, etc. (1962)**

F  
8-11560

*Gazz. uff. Repub. ital.*, (230) : 3756

Decreto ministeriale 28 agosto 1962. Regolamentazione della pesca nelle acque interne dell'Emilia (Ministerial decree regulating fishing in the internal waters of Emilia province.—28 August 1962)

Provisions in respect of mesh sizes, etc.

**Jordan. Laws, Statutes, etc. (1962)**

F  
8-11561

*Off. Gaz. Jordan*, (1934) : 957

Defence order No. 23, prohibiting bird shooting and fishing by any means whatsoever.—25 August 1962

Under article 5 of defence act 1939.

- Madagascar. Laws, Statutes, etc.** (1962) F  
8-11562  
*J. off. Répub. malgache*, (256) : 2610-2

Décision n° 258-MAP/FOR du 25 octobre 1962, fixant la date d'ouverture de la pêche à la truite pour l'année 1962 (Decision No. 258-MAP/FOR fixing the opening date of trout fishing for 1962.—25 October 1962)

From 11 November 1962.

- New Zealand. Laws, Statutes, etc.** (1962) F  
8-11563  
Separate publication, 1962/82 : 3 p.

The fisheries experimental waters (lake Waingata) regulations 1962.—6 June 1962

Declare lake Waingata to be a fisheries experimental water for a further period of five years; prohibit fishing in the lake except pursuant to a special permit.

- New Zealand. Laws, Statutes, etc.** (1962) F  
8-11564  
Separate publication, 1962/83 : 3 p.

The Hawera (winter season) fishing regulations, 1962.—6 June 1962

Make provisions for a winter season for fishing for perch in the Hawera acclimatization district.

- New Zealand. Laws, Statutes, etc.** (1962) F  
8-11565  
Separate publication, 1962/99 : 2 p.

The Rotorua trout fishing experimental waters (lake Opouri) regulations, 1962.—27 June 1962

The Rotorua trout fishing experimental waters (lake Opouri) regulations, 1957 are hereby revoked. Declare lake Opouri to be a fisheries experimental water for a further five years and prohibit fishing in lake Opouri, except pursuant to a special authority.

- Niger, Republic of. Laws, Statutes, etc.** (1962) F  
8-11566  
*J. off. Niger*, (Spec. 4) : 60-81

Loi n° 62-12 du 13 juillet 1962 instituant un code de travail de la république du Niger (Act No. 62-12 laying down a labour code for the republic of Niger. —13 July 1962)

Comprehensive provisions.

- Peru. Laws, Statutes, etc.** (1962) F  
8-11567  
*Peruano*, (6393) : 3 p.

Resolución ministerial No. 3939 por la que se otorga licencia provisional en Puno para una planta envasadora de truchas.—2 de agosto de 1962 (Ministerial resolution No. 3939 granting a provisional licence for a trout tinning plant at Puno.—2 August 1962)

With a capacity of 400 kg. per day.

# MISCELLANEOUS AND AUXILIARIES

## Peru. Laws, Statutes, etc. (1962)

F  
8-11568

*Peruano*, (6436) : 2 p.

Resolución ministerial No. 4922 por la que se concede licencia provisional para instalar una fábrica de envasado de truchas en Juliaca.—25 de septiembre de 1962 (Ministerial resolution No. 4922 granting a provisional licence for the establishment of a trout tinning plant at Juliaca.—25 September 1962)

With a processing capacity of 400 kg. per day.

## New South Wales. Laws, Statutes, etc. (1962)

F  
8-11569

*Govt Gaz. N.S.W.*, (79) : 2458

Proclamation made under the fisheries and oyster farms act, 1935, as amended, relating to the inland waters of New South Wales west of the crest of the Great Dividing Range.—20 June 1962

Repeals proclamation published in G.G. No. 134 of 11 Nov. 1960, and prohibits the taking of fish by nets of every description during the months of Sep., Oct. and Nov. of each year from 1962 to 1966, both inclusive.

## New South Wales. Laws, Statutes, etc. (1962)

F  
8-11570

*Govt Gaz. N.S.W.*, (79) : 2516

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to the entrance waters of Nambucca River, County of Raleigh.—25 July 1962

Prohibits the taking of fish by spears, spear guns and similar devices, from 13 Jul. 1962 to 12 Jul. 1967, in the prescribed waters.

## New South Wales. Laws, Statutes, etc. (1962)

F  
8-11571

*Govt Gaz. N.S.W.*, (79) : 2516

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to the entrance waters to Wallaga Lake, County of Dampier.—25 July 1962

Prohibits the taking of fish by means of nets of every description other than prawn nets, as prescribed, from 1 Aug. 1962 to 31 Jul. 1967. Repeals the proclamation of 6 Jan. on same subject.

## New South Wales. Laws, Statutes, etc. (1962)

F  
8-11572

*Govt Gaz. N.S.W.*, (79) : 2516

Proclamation, made under the fisheries and oyster farms act, 1935–1960, relating to portion of the waters of Burrangylong or Grove Creek, County of Georgiana.—8 August 1962

Prohibits the taking of fish by all methods from 1 Sep. 1962 to 31 Aug 1967, in the prescribed waters.

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**New South Wales. Laws, Statutes, etc. (1962)**

F  
8-11573

*Govt Gaz. N.S.W.*, (79) : 2464

Amendment of the regulations made under the fisheries and oyster farms act, 1935-1960.—15 August 1962

Adds new regulation (No. 161) to amend the schedule listing fresh water fish, by omitting several species.

**Razran, G. (1961)**

G  
8-11574

*Psychol. Rev.*, 68 : 81-147

The observable and the inferable conscious in current Soviet psychophysiology: interoceptive conditioning, semantic conditioning, and the orienting reflex

PA 36 (1) : 67. Systematic review of Russian psychobiology; concentrates on recent output—1500 reports since 1950—and also incorporates a brief historical prospectus.

**Brereton, J. Le G. (1962)**

G  
8-11575

*Ecology*, 43 (1) : 63-9

A laboratory study of population regulation in *Tribolium confusum*

BA 38A (2) 4827. Changes in the number of small larvae, pupae, and new adults during the first 190 days of a *Tribolium confusum* population were found to produce curves of the same general pattern. This suggests little or no change in the probability of survival of these life stages during the initial growth of the population when the major changes of population size are taking place.



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8-12001 to 8-12523

### GENERAL (OCEANOGRAPHY, LIMNOLOGY, AND FISHERIES)

- M  
8-12001
- WMO. Fourth Congress, Geneva 1963** (1962)  
Geneva, Cg-IV/Doc. 51, ADD. 1, mimeo, 8 p.
- Reports by presidents of technical commissions. Maritime meteorology. Addendum to the report by the president of the commission for maritime meteorology—submitted by the president of CMM

Co 8-07012.

- M  
8-12002
- Slijper, E. J.** (Pomerans, A. J., Transl.) (1962)  
London, Hutchinson & Co. (Publ.) Ltd., 475 p.  
Whales

*En* 59-5300. Deals with all aspects of cetacean biology and whale industries, under following chapter headings: Historical introduction; Evolution and external appearances; Locomotion and locomotory organs; Respiration; Heart, circulation, and blood; Behaviour; Hearing; The production of sounds; Senses and the central nervous system; Feeding; Metabolism; Distribution and migration; Reproduction; The future of whales and whaling; Classification of Cetacea; Bibliography, by chapters. Appendix: Names of cetaceans in different languages. Index.

- M  
8-12003
- Anon.** (1962)  
*Science*, 137 (3526) : 271  
[Announcements]

Incl. note on conversion of presidential yacht 'Williamsburg' for IIOE.

- M  
8-12004
- ICW** (1964)  
*Rep. int. Comm. Wal.*, (14), 1962/63 : 122 p.

Lists of commission members and participants; general report of whaling activities, notifications and resolutions; table of infractions; appendices incl. report of scientific committee and sub-committee, list of documents received, financial accounts; table of oil production statistics for 1952/53–1962/63; map of world with whaling areas. This issue also contains the reports and supplements by the Committee of Three Scientists on the Special Scientific Investigation of the Antarctic Whale Stocks, describing the analyses of stock data, the results obtained and recommendations for conservation action by the Commission.

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- Aibulatov, N. A. & V. P. Nikolaev** (1960) M  
8-12005  
JPRS : 4105, 10 p.

Jubilee conference of the Black Sea experimental scientific research station of the institute of oceanology of the USSR academy of sciences

En 8-12004.

- Anon.** (1963) M  
8-12006  
*Norsk Hvalfangst-tid.*, 52 (3) : 70-2  
Whales and whaling

Section of the annual report of the National Oceanographic Council for the period 1 Apr. 1961-31 Mar. 1962 describing the whale research activities of the institute.

- Morris, D.** (1962)\* M  
8-12007  
New York, Collier books, 224 p.  
A family guide to saltwater fishing

- IIOE** (1963) M  
8-12008  
*IIOE Newslett. Jap.*, (3) : 6 p.

Published by IIOE Data Centre of Japan, Meteorological Agency, Tokyo. Gives news of progress of Indian Ocean expedition plans and execution, especially Japanese participation. Incl. addresses, cruise plans, resolution of IOC etc.

- McMichael, D. F.** (1962) M  
8-12009  
*Aust. Nat. Hist.*, 14 (3) : 74  
Sea shells of the world

Review.

- Deacon, G. E. R.** (1962) M  
8-12010  
London, P. Hamlyn, 297 p.  
Oceans; an atlas history of man's exploration of the deep

American ed. (Garden City, N.Y., Doubleday) has title: Seas, maps and men; an atlas history of man's exploration of the oceans.

- Densmore, D.** (1962) M  
8-12011  
*Oceanus*, 9 (2) : 22

Re 8-12010.

# GENERAL

- Hill, M. N.** (Ed.) (1962) M  
8-12012  
New York, J. Wiley & Sons: 864 p.  
The sea. Ideas and observations on progress in the study of the seas.  
Vol. 1. Physical oceanography

Treatises collected under sections: Fundamentals; Interchange of properties between sea and air; Dynamics of ocean currents; Transmission of energy within the sea; Waves; Turbulence; and the Physics of sea-ice. Contains 8-12013, 8-12044 to 8-12068, 8-12329.

- Hersey, J. B. & R. H. Backus** (1962) M  
8-12013  
*In* 8-12012 : 498-539  
Sound scattering by marine organisms

Discusses the topic under chapters: Occurrence and description of scattering layers; Identification of sound scatterers; Sound-scattering theory; Sound-scattering observations; What is "the deep scattering layer"?; Ideas and miscellaneous observations.

- Anon.** (1962) M  
8-12014  
*Oceanus*, 9 (2) : 23  
Rediscovering the sea  
Re 8-12012.

- Gaskell, T. F.** (1962) M  
8-12015  
*New Scient.*, 16 (317) : 646  
Study of sea water  
Re 8-12012.

- Clarke, R.** (1963) M  
8-12016  
*Nature, Lond.*, 197 (4886) : 653-4  
Zoological expeditions

Short report on the twenty-eighth annual meeting of the Association of British Zoologists held at the offices of the Zoological Society of London on Jan. 5. Several papers were read on "The scientific aims, planning and results of zoological expeditions".

- Moore, J. C.** (1963) M  
8-12017  
*Science*, 140 (3563) : 166-7  
Cetacea

Re 8-12002. Treats structural and functional aspects of cetacean biology, behaviour, distribution and migration, evolution, the history of whaling, and the future of whaling. With ill.

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**Anon. (1963)**

MG  
8-12018

*New Scient.*, 18 (333) : 39

A nippy craft for undersea studies

U.S. Office of Naval Research studies new propulsion systems to improve manoeuvrability of special-purpose submarines.

**Vershinskii, N. V. (1960)\***

MF  
8-12019

Moskva, Gosenergoizdat, 223 p.

Podvodnoe televidenie (Underwater television)

**Fridriksson, A. (1962)**

MF  
8-12020

*Fish. News int.*, 1 (5) : 35-7

International council for the exploration of the sea

Reviews history of ICES, its publications, symposia, advisory role, structure, and organizations of cooperative research.

**Cade, C. M. (1963)**

MF  
8-12021

*Discovery*, 24 (2) : 22-7

Navigation—man's debt to the animals

Describes a representative selection of animal navigation systems and gives physical bases of these systems and shows which have man-made counterparts. Refers to *Gymnarchus*, *Electrophorus*, *Talitrus*, *Limulus* and *Daphnia*.

**Scott, T. D. (1962)\***

MF  
8-12022

London, British Association for the Advancement of Science, 338 p.

The marine and fresh water fishes of South Australia

**Lanham, U. (1962)\***

MF  
8-12023

London, Columbia University Press, 116 p.

The fishes

An introduction to fishes, written in the broadest detail, specifically for those without any biological training.

**Greenwood, P. H. (1963)**

MF  
8-12024

*Nature, Lond.*, 196 (4861) : 1246

The fishes

Re 8-12023.



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- Yanner-Wilson, J.** (1963) MF  
*Nature, Lond.*, 195 (4846) : 1055-6  
 The Ghana science association 8-12025

Short report on the 2nd congress of the association held in June-July at the University of Ghana. Two papers on fisheries are referred to: "The development of fishery resources" by G. C. Rawson and J. N. N. Adjetey and "The spawning migration of *Sardinella aurita* (Val.)" by E. A. Kwei.

- USPHS** (1961)\* F  
 233 p. 8-12026  
 Soviet water supply and pollution control

Available from Office of Technical Services, U.S. Department of Commerce, Washington.

- Goodey, J. B.** (1963) F  
 London, Methuen, 544 p. 8-12027  
 Soil and freshwater nematodes

NE 1951 Goodey, T. Contains a brief introduction on basic morphology of nematodes; a classification of the groups dealt with, set out in full detail from orders to genera; describes and illustrates with line drawings each genus and its type species. There is also a section noting the salient features of the biology of each genus. Provides 87 tabular keys to enable the field worker to identify a nematode, first to its order, then through the succeeding lower categories to its genus. Contains bibliography which aims to include a reference to the standard works on every species mentioned.

- Mansueti, R. J.** (1963) F  
*Chesapeake Sci.*, 4 (1) : 63 8-12028  
 The Balkan lake Ohrid and its living world

Re 60-5293.

- Wynne-Edwards, V. C.** (1963) G  
*Nature, Lond.*, 197 (4867) : 527 8-12029  
 Ecology for students

Re 62-04025. Based on the larger work of Andrewartha and Birch, The distribution and abundance of animals (1954). A section on theory mainly concerned with terrestrial environment and a practical course, consisting of twenty varied experiments to be carried out in the laboratory.

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## PHYSICAL OCEANOGRAPHY AND LIMNOLOGY

**Blackburn, M.** (1962)

M  
8-12030

*Spec. sci. Rep. U.S. Fish Wildl. Serv.—Fish.*, (400) : 1-48

Tuna oceanography in the eastern tropical Pacific

BA 40E (1) 391. A report on three years of oceanographic investigation in the eastern tropical Pacific Ocean.

**Bryan, G. W. & E. Ward** (1962)

M  
8-12031

*J. Mar. biol. Ass. U.K.*, 42 (2) : 199-241

Potassium metabolism and the accumulation of 137 caesium by decapod Crustacea

BA 40E (1) 4132. The accumulation of Cs<sup>137</sup> from sea water has been examined in relation to K metabolism in the lobster *Homarus vulgaris* and in the prawn *Palaemon serratus*.

**Mallet, L., L. V. Perdriau & J. Perdriau** (1963)

M  
8-12032

*C.R. Acad. Sci., Paris*, 256 (16) : 3487-9

Pollution par les hydrocarbures polybenzéniques du type benzo-3.4 pyrène de la région occidentale de l'Océan Glacial Arctique (Pollution of the western region of the Arctic Ocean by hydrocarbons of the type benzo-3.4)

Preliminary note reporting results of analyses of sediments collected on the Greenland coast. The origins of the pollution are discussed.

**Pritchard, D. W.** (1963)

M  
8-12033

*Chesapeake Sci.*, 4 (1) : 60

Oceanography

Re 62-01178.

**Tum, P. P.** (1960)\*

M  
8-12034

Moskva, n.p., 43 p.

Aral'skoie more: navigatsionno—geograficheskii i gidrometeorologicheskii ocherk (The Aral Sea: Navigational, geographic and hydrometeorological essays)

Descriptors: Aral Sea, navigation, geography, hydrology and meteorology.

**Tum, P. P.** (1961)

M  
8-12035

JPRS: 9448, 43 p.

The Aral Sea: Navigational, geographic and hydrometeorological essays

En 8-12034. Available from Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

- Ericson, D. B., M. Ewing & G. Wollin** (1963) M  
8-12036  
*Science*, 139 (3556) : 727-37  
 Pliocene-Pleistocene boundary in deep-sea sediments

Briefly reviews earlier studies of sediment cores and discusses climatic implications.

- Swallow, M.** (1962) M  
8-12037  
*Discovery*, 23 (6) : 17-22  
 Deep currents in the oceans

Discusses charting of the deep circulation of the oceans by using new direct measuring equipment, and implications of knowledge of these deep water movements for meteorology and fishing.

- Stommel, H.** (1963) M  
8-12038  
*Science*, 139 (3555) : 572-6  
 Varieties of oceanographic experience

The ocean can be investigated as a hydrodynamical phenomenon as well as explored geographically.

- Seckel, G. R.** (1962) M  
8-12039  
*Fish. Bull., U.S.*, 61 (193) : 371-427  
 Atlas of the oceanographic climate of the Hawaiian Islands region

In the area bounded by 10° N, 30° N, 150° W, and 180° W, the distribution of surface variables is investigated in terms of associated physical processes.

- Japan Meteorological Agency** (1962) M  
8-12040  
*Results mar. Obsns, Tokyo*, (29) : 284 p.  
 Tabulated physical-chemical and biological data January-June 1961, in N. Pacific

- Carruthers, J. N.** (1962)\* M  
8-12041  
*Oceanus*, 9 (2) : 17  
 Atmospheric model studies

Le 8-08099.

- Ponomarenko, G. P.** (1963) M  
8-12042  
*Dokl. Akad. Nauk SSSR*, 149 (5) : 1178-81  
 Glubinnoe protivotechenie Lomonosova na ekvatore v Atlanticheskome okeane (Lomonosov's abyssal equatorial counterflow in the Atlantic)

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**Wilson, J. T. (1963)**

M  
8-12043

*Nature, Lond.*, 197 (4867) : 536-8

Evidence from islands on the spreading of ocean floors

Based on literature published about ocean islands. Evidence is obtained of possible horizontal motions of islands. Vertical motions have been discussed.

**Fofonoff, N. P. (1962)**

M  
8-12044

*In* 8-12012 : 3-30

Physical properties of sea-water

Discusses the topic under chapters: The equilibrium thermodynamic state; Equation of state for sea-water; Entropy; Chemical potential difference; The non-equilibrium state; other physical properties of sea-water.

**Eckart, C. (1962)**

M  
8-12045

*In* 8-12012 : 31-41

The equations of motion of sea-water

Discusses the topic under chapters: Thermodynamics; Hydrodynamics; The irreversible processes; Transformation of the equations; The zeroth approximation; The first approximation; Definitions related to convective motion; The field equations.

**Deacon, E. L. & E. K. Webb (1962)**

M  
8-12046

*In* 8-12012 : 43-87

Small-scale interactions

Discusses the topic under chapters: General considerations of transfer; Momentum transfer and the wind-profile; Drag coefficients of the sea surface; Transfer of heat and water vapour.

**Malkus, J. S. (1962)**

M  
8-12047

*In* 8-12012 : 88-294

Large-scale interactions

Discusses the topic under chapters: How the whole system works; Determination of air-sea fluxes; Climatology of energy exchange and the global heat and water budgets; Heat and water exchange and its role in tropical circulations; Large-scale momentum relations; Exchange mechanisms and fluctuations; Exchange fluctuations in mid-latitudes and long-period interaction anomalies; Concluding remarks.

**Rex, R. W. & H. D. Goldberg (1962)**

M  
8-12048

*In* 8-12012 : 295-304

Insolubles

Discusses the topic under chapters: Meteorology of transport; Eolian materials in marine sediments.



**Woodcock, A. H.** (1962) M  
8-12049  
*In* 8-12012 : 305-12  
 Solubles

**Revelle, R. & H. E. Suess** (1962) M  
8-12050  
*In* 8-12012 : 313-22  
 Gases

Discusses the topic under chapters: Oxygen and nitrogen; Rare gases; Carbon dioxide.

**Fofonoff, N. P.** (1962) M  
8-12051  
*In* 8-12012 : 323-96  
 Dynamics of ocean currents

Discusses the topic under chapters: Conservation equations for momentum and mass; separation into steady and time-dependent motion; Magnitude of forces: Steady-state circulation; Steady inertial circulation; Convective circulation; Time-dependent motion.

**Tyler, J. E. & R. W. Preisendorfer** (1962) M  
8-12052  
*In* 8-12012 : 397-451  
 Transmission of energy within the sea. Light

Discusses the topic under chapters: Physical constructs; Instrumentation for the measurement of the underwater light field and the determination of the optical properties of the sea; Radiance distribution; Attenuation coefficient; Volume scattering functions and total scattering coefficient; Irradiance; Diffuse attenuation function and reflectance function; Scalar irradiance (spherical irradiance); Absorption coefficient; Path function; Data; Applications; List of symbols.

**Duntley, S. Q.** (1962) M  
8-12053  
*In* 8-12012 : 452-5  
 Underwater visibility

Discusses the topic under chapters: Image transmission; Inherent contrast; Sighting range.

**Clarke, G. L. & E. J. Denton** (1962) M  
8-12054  
*In* 8-12012 : 456-68  
 Light and animal life

- M  
8-12055
- Liebermann, L. N.** (1962)  
*In* 8-12012 : 469-75  
 Other electromagnetic radiation

Discusses the topic under chapters: Electromagnetic properties of sea-water; Propagation through sea-water; The effect of the sea-surface on electromagnetic propagation; Natural electromagnetic radiation or "noise" in the sea.

- M  
8-12056
- Vigoreux, P. & J. B. Hersey** (1962)  
*In* 8-12012 : 476-97  
 Sound in the sea

Discusses the topic under chapters: The nature of sound; Propagation of sound; in water; Noise; Instruments and applications of sound to oceanography.

- M  
8-12057
- Cartwright, D. E.** (1962)  
*In* 8-12012 : 567-89  
 Waves. Analysis and statistics

Discusses the topic under chapters: Fundamental equations of wave motion; Statistical formulation; Properties of a wave system in terms of its directional energy spectrum; Estimating the directional energy spectrum; Waves recorded by a single detector; Spectral measurement; Second-order approximations to energy spectra.

- M  
8-12058
- Rossiter, J. R.** (1962)  
*In* 8-12012 : 590-610  
 Long-term variations in sea-level

Discusses the topic under chapters: The determination of mean sea-level; Causes of variations in sea-level; The analysis of observations; Some geophysical implications of long-term variations in sea-level; Conclusion.

- M  
8-12059
- Groen, P. & G. W. Groves** (1962)  
*In* 8-12012 : 611-46  
 Surges

Discusses the topic under chapters: Description; Dynamics and forecasting.

- M  
8-12060
- Munk, W. H.** (1962)  
*In* 8-12012 : 647-65  
 Long ocean waves

Discusses the topic under chapters: The instruments; The spectrum; Surf beat; Shelf waves; Tsunamis.

**Barber, N. F. & M. J. Tucker** (1962)  
*In* 8-12012 : 664-99  
 Wind waves

M  
 8-12061

Discusses the topic under chapters: Kinematics of waves; The description of a complicated wave pattern; the wave spectrum; Theories of wave generation by wind; Wave prediction; Waves from distant storms; Waves approaching the shore; The surf zone; Ships and waves; Methods of observation and analysis—methods taking no account of direction of travel; Methods of observation and analysis—the directional power spectrum.

**Darbyshire, J.** (1962)  
*In* 8-12012 : 700-19  
 Microseisms

M  
 8-12062

Discusses the topic under chapters: Relation between sea waves and microseisms; The nature of microseisms; Refraction of microseisms; Storm tracking and estimation of the direction of approach of microseisms; Estimation of direction from the nature of microseisms; Instruments; Other work.

**Cox, C. S.** (1962)  
*In* 8-12012 : 720-30  
 Ripples

M  
 8-12063

Discusses the topic under chapters: Spectrum and mean square slope; Effect of slicks; Shape of a rippled water surface; Growth of ripples.

**LaFond, E. C.** (1962)  
*In* 8-12012 : 731-51  
 Internal waves. Part 1

M  
 8-12064

Discusses the topic under chapters: Measurements; Observed relation.

**Cox, C. S.** (1962)  
*In* 8-12012 : 752-63  
 Internal waves. Part 2

M  
 8-12065

Discusses the topic under chapters: Differential equations; Spectrum; Internal waves and turbulence. Co 8-12064.

**Hansen, W.** (1962)  
*In* 8-12012 : 764-801  
 Tides

M  
 8-12066

Discusses the topic under chapters: The hydrodynamic equations and their application to tidal problems; Tidal observation; Tidal charts; Classical theory; Numerical methods for ascertaining the tides and tidal currents. Boundary-value problems; The application of difference methods to initial-boundary problems; Numerical solutions of initial-boundary-value problems of tides in one and two dimensions; Internal tides.

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- Bowden, K. F.** (1962) M  
8-12067  
*In* 8-12012 : 802-25  
 Turbulence

Discusses the topic under chapters: General properties of turbulence; Turbulence in the sea; Turbulent fluctuations and turbulent transports; Vertical turbulence; Horizontal turbulence.

- Pounder, E. R.** (1962) M  
8-12068  
*In* 8-12012 : 826-38  
 The physics of sea-ice

Discusses the topic under chapters: Mechanical properties; Thermal properties; Electrical properties; Growth and disintegration of an ice cover; Theory of sea-ice structure and properties.

- Ivanov, V. M.** (1961) M  
8-12069  
*Probl. Sev. (En Transl.)*, (4) : 25-44

On the relationship of hydrometeorological processes in the Atlantic part of the Arctic and the thermal and dynamic state of Gulf Stream

- Timofeev, V. T.** (1961) M  
8-12070  
*Probl. Sev. (En Transl.)*, (4) : 45-56

The effect of the deep layers of Atlantic waters on the hydrological regime of the Kara Sea

- Shishkov, Yu. A.** (1961) M  
8-12071  
*Probl. Sev. (En Transl.)*, (4) : 133-40

Ice concentration in the southwest part of the Kara Sea and meridional heat transfer in the atmosphere

- Bulgakov, N. P.** (1961) M  
8-12072  
*Probl. Sev. (En Transl.)*, (4) : 141-8

Determination on functional graphs of the time at which water reaches the freezing point and of the depth of density mixing

- Keen, M. J.** (1963) M  
8-12073  
*Nature, Lond.*, 197 (4870) : 888-90

Magnetic anomalies over the Mid-Atlantic

Intensity of earth's magnetic field over Atlantic Ocean measured on a number of flights organized by department of Mines and Technical Surveys of Canada and also under project Magnet (U.S. Hydrographic Office).



**Strong, C. C. & R. G. Skolmen** (1963)

M  
8-12074

*Nature, Lond.*, 197 (4870) : 890

Origin of drift-logs on the beaches of Hawaii

Pacific Ocean currents can carry objects to the Hawaiian Islands not only from North America, but also from Western Pacific islands and perhaps from the mainland of Asia. Since logs float very low in water, they should be little influenced by wind action.

**Carruthers, J. N.** (1963)

M  
8-12075

*Nature, Lond.*, 197 (4871) : 942-6

History, sand waves and near-bed currents of la Chapelle Bank

Now that presence of sand ripples beneath very great depths water has been revealed by submarine photography, it is of interest to discover that speeds of water movement can occur very close down to deep ocean floor at such places. Particular interest is attached to places where much is known about convolutions of sea-bed because of detailed operations with echo-sounding sets and where depth is small enough for it to be possible to repeat the easy single bottom current measurements at hourly intervals. Measurements of currents close to bottom were made on La Chapelle Bank on 7 and 8 Nov. 1962, from research vessel 'Sarsia' belonging to Marine Biological Association of the United Kingdom.

**California University. Scripps Institution of Oceanography** (1961)

M  
8-12076

Berkeley, University of California, 349 p.

Oceanic observations of the Pacific pre-1949

Contains observations made prior to 1949. Apart from incomplete coverage of Japanese and Russian publications the bibliography offers access to almost all of the Pacific oceanographic data published in other media than the present series.

**Greenhalgh, R. & J. P. Riley** (1963)

M  
8-12077

*Nature, Lond.*, 197 (4865) : 371-2

Occurrence of abnormally high fluoride concentrations at depth in the oceans

During an investigation of the constancy of ionic composition of sea water and in particular of the distribution of fluoride ion in the oceans, unusually large variations in the fluoride/chlorinity ratio were found.

**Davidson, C. & M. J. Keen** (1963)

M  
8-12078

*Nature, Lond.*, 197 (4865) : 372-3

Size analyses of turbidity current sediment

Analyses of sediment cores obtained from the Iberia Abyssal Plain.

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- Russel, R. J.** (1963) M  
8-12079  
*Science*, 139 (3549) : 9-15  
 Recent recession of tropical cliffy coasts  
 Elevated benches and other coastal forms give evidence of eustatic changes in sea level.
- Fisher, R. L. & R. W. Raitt** (1962) M  
8-12080  
*Deep-Sea Res.*, 9 : 423-43  
 Topography and structure of the Peru-Chile Trench  
 Data from 5400 miles of echo-sounding traverses and eight seismic-refraction stations (three off Peru, five off Chile) are reported.
- Howet, M. R.** (1962) M  
8-12081  
*Deep-Sea Res.*, 9 : 445-55  
 Some direct measurements of the non-tidal drift on the continental shelf between Cape Cod and Cape Hatteras
- Francis, T. J. G.** (1962) M  
8-12082  
*Deep-Sea Res.*, 9 : 457-64  
 Black mud canyon  
 A prominent canyon in the continental slope 150 miles west of Brittany was followed from its origin at the edge of the shelf to a depth of 2000 fm. The bathymetric chart covers an area of approximately 5 by 30 nautical miles and shows contours at 100 fm intervals.
- Steele, J. H., J. R. Barrett & L. V. Worthington** (1962) M  
8-12083  
*Deep-Sea Res.*, 9 : 465-74  
 Deep currents south of Iceland  
 Direct current measurements with neutrally-buoyant floats and routine hydrographic observations were made south of Iceland to study the deep current resulting from overflow of Norwegian Sea water into the Atlantic.
- Needham, H. D.** (1962) M  
8-12084  
*Deep-Sea Res.*, 9 : 475-86  
 Ice-rafted rocks from the Atlantic Ocean off the coast of the Cape of Good Hope
- Volkman, G.** (1962) M  
8-12085  
*Deep-Sea Res.*, 9 : 493-500  
 Deep current observations in the western North Atlantic  
 Reports on two series of direct current measurements across the region inshore of the Gulf Stream.

**Niskin, S. J.** (1962)

*Deep-Sea Res.*, 9 : 501-3

A water sampler for microbiological studies

M  
8-12086

A Bellows type water sampler consisting of a spring-activated metal frame and a detachable two-litre, sterile, disposable container, is described. The device can operate at any oceanic depth.

**Kobe Marine Observatory. Oceanographical Section** (1962)

*Results mar. Obsns, Tokyo*, (27)

(Report of the oceanographic observations in the sea south of Honshu in March, 1960). *Ni*

M  
8-12087

Charts of geopotential topography, chlorinity, surface current, temperature dissolved O<sub>2</sub>, phosphate-P, nitrite-N and diatoms. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (12).

**Cox, R. A.** (1962)

*Deep-Sea Res.*, 9 : 504-6

Temperature compensation in salinometers

M  
8-12088

The temperature coefficient of the electrical conductivity of seawater varies considerably with the salinity. The magnitude of the variations are shown, and the effect on the calibration of salinometers. It is shown that potassium chloride cannot be used to calibrate precision salinometers.

**Gudkovich, Z. M.** (1961)\*

*Okeanologiya*, 1 (4) : 608-12

(On the nature of the Pacific current in Bering Strait and the causes of its seasonal variations). *Ru*

M  
8-12089

**Gudkovich, Z. M.** (1962)

*Deep-Sea Res.*, 9 : 507-10

On the nature of the Pacific current in Bering Strait and the causes of its seasonal variations

*En* 8-12089.

M  
8-12090

**Voit, S. S. et al.** (1961)\*

*Okeanologiya*, 1 (4) : 614-25

(Some special properties of the water circulation in the Black Sea and of the conditions near the Bosphorus). *Ru*

M  
8-12091

An analysis of the results obtained on the ninth voyage of the 'Mikhail Lomonosov' on the general hydrological and hydrochemical conditions in the Black Sea in autumn 1960.

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- Voit, S. S. et al.** (1962) M  
8-12092  
*Deep-Sea Res.*, 9 : 511-22  
 Some special properties of the water circulation in the Black Sea and of the conditions near the Bosphorus  
*En* 8-12091.
- Gakkel', Ia. Ia. & L. P. Samsoniia** (1961)\* M  
8-12093  
*Okeanologiia*, 1 (4) : 691-700  
 (The first drifting radio-buoys). *Ru*
- Gakkel', Ya. Ya. & L. P. Samsoniia** (1962) M  
8-12094  
*Deep-Sea Res.*, 9 : 538-46  
 The first drifting radio-buoys  
*En* 8-12093.
- Tarasov, A. N.** (1961)\* M  
8-12095  
*Okeanologiia*, 1 (4) : 701-9  
 (An evaluation of the accuracy of the co-ordination of sounding and oceanographic work on the open sea (sailing on a calculated course) ). *Ru*
- Tarasov, A. N.** (1962) M  
8-12096  
*Deep-Sea Res.*, 9 : 547-55  
 An evaluation of the accuracy of the co-ordination of sounding and oceanographic work on the open sea (sailing on a calculated course)  
*En* 8-12095.
- Shuleikin, V. V.** (1962) M  
8-12097  
 OTS, 11 p.  
 Analysis of measurements of largest wind-caused waves in the ocean  
*En* 1956, Shuleikin, V. V. Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.
- Gerard, R. D.** (1962) M  
8-12098  
 Palisades, N.Y., Lamont Geological Observatory, AT (30-1)-1808, 16 p.  
 Lamont sea water radiocarbon program  
 Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.



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8-12099
- Konaga, S.** (1962)  
*J. Mar. met. Soc., Kobe*, 37 (3) :  
 (The internal wave of short period from the hysteresis of bathythermograph). *Ni En*  
 Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (3).
- M  
8-12100
- Kobe Marine Observatory. Oceanographical Section** (1962)  
*Results mar. Obsns, Tokyo*, (26)  
 (Report of the oceanographic observations in the sea south of Honshu from July to August, 1959). *Ni*
- Charts of geopotential topography, chlorinity, surface current, temperature, dissolved O<sub>2</sub>, phosphate-P, nitrite-N and diatoms. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (11).
- M  
8-12101
- Kawanabe, Y.** (1962)  
*J. Mar. met. Soc., Kobe*, 37 (4)  
 (The synoptic and statistical investigation on the prediction of typhoon motion (the final reports)). *Ni En*  
 Charts of typhoon frequency crossing each 2° square during 1912-1960, for months Jun. to Nov. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (13).
- M  
8-12102
- Ito, A.** (1962)  
*J. Mar. met. Soc., Kobe*, 38 (1)  
 (On the statistical characteristics of winds in the sea south of Honshu). *Ni En*  
 Comparison of wind-velocity observations at sea with those at land stations. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (15).
- M  
8-12103
- Japan Society for the Promotion of Science. Deep Sea Research Committee** (1961)  
*Rep. JEDS*, 2  
 Collected papers concerning with the Japanese expeditions of deep sea  
 Contains 8-12104 to 8-12108.
- M  
8-12104
- Iijima, A. & H. Kagami** (1961)  
*Rep. JEDS*, 2 (11)  
 23. Lawsonite—and pumpellyite-rock fragments from deep-sea bottom off the coast of Sanriku, northeastern Japan—Report on JEDS-2S of the Japanese deep sea expedition (1)

**Miyake, Y. & Y. Sugimura** (1961)

*Science*, 133 (3467) : 1-3

Ionium-thorium chronology of deep-sea sediments of the western north Pacific Ocean

The rate of deposition of deep-sea deposits collected at the depths of 6215 to 8450 m in the western part of the North Pacific Ocean was estimated by means of the ionium/thorium ratio. The ratio was determined by an alphaspectrometer. Issued also as: *Rep. JEDS*, 2 (15).

**Kobayashi, K., K. Oinuma & T. Sudo** (1961)

*Rep. JEDS*, 2 (16)

(20. Clay minerals in the core sample of deep sea sediment from Japan Trench). *Ni En*

Clay mineralogical study was carried out on the core sample (JEDS-1-R), which were obtained from the ocean floor of 8450 m water depth, at the station 142° 18' E, 30° 24' N at the time of Japanese expedition of deep sea in Jun. 1959. Clay mineral analyses were carried out by means of X-ray thermal, and electron micrographic methods.

**Uyeda, S. et al.** (1961)

*Bull. Earthq. Res. Inst. Tokyo*, 39 : 115-131

6. Studies of the thermal state of the earth. The seventh paper: a sea bottom thermogradometer. *Ni*

Description of an apparatus, for measuring the geothermal gradient in the sea floor, which consists of a probe containing two pairs of thermistors and a recorder. Issued also as: *Rep. JEDS* 2 (18). Ci 8-08039.

**Hosohara, K., R. Kuroda & H. Hamaguchi** (1961)

*Nippon Kagaku Zasshi*, 82 (3) : 347-9

(Photometric determination of mercury in sea water). *Ni En*

Description of the method and presentation of some results. Issued also as: *Rep. JEDS* 2 (19).

**Japan Society for the Promotion of Science. Deep Sea Research Committee** (1961)

*Rep. JEDS*, 3

Collected papers concerning with the Japanese expeditions of deep sea

Contains 8-12110, 8-12179 and 8-12111 to 8-12116.

**Hosokawa, K.** (1961)

*Nippon Kagaku Zasshi*, 82 (8) : 1107-8

(Mercury content of deep sea water). *Ni En*

Examination of mercury dissolved in sea water at depths of 0,500 and 3,000 m in the Lamapo Deep.

M  
8-12111

**Hosokawa, K.** (1962)  
*Rep. JEDS*, 3 (21)  
 (Mercury content of deep sea water). *Ni* *En*  
 Ci 8-12110.

M  
8-12112

**Hamaguchi, H., M. Osawa & N. Onuma** (1961)  
*Nippon Kagaku Zasshi*, 82 (6) : 691-3  
 (The vertical distribution of minor elements in core samples from the Japan Trench). *Ni* *En*  
 Spectrochemical investigation.

M  
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*Rep. JEDS*, 3 (23)  
 (The vertical distribution of minor elements in core samples from the Japan Trench). *Ni* *En*  
 Ci 8-12112.

M  
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**Miyake, Y. et al.** (1962)  
*J. Radiat. Res.*, 3 (3) : 141-7  
 Penetration of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  in deep layers of the Pacific and vertical diffusion rate of deep water  
 Issued also as: *Rep. JEDS*, 3 (25).

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8-12115

**Fukuoka, J.** (1962)  
*J. oceanogr. Soc. Japan*, 18 (1) : 5-12  
 Abyssal circulation in the Atlantic near the poles and abyssal circulation in the Pacific and other oceans in relation to the former  
 Discussion of data with regard to oxygen salinity and density. Issued also as: *Rep. JEDS*, 3 (27).

M  
8-12116

**Iijima, A. & H. Kagami** (1962)  
*Rep. JEDS*, 3 (26)  
 (Cainozoic tectonic development of the continental slope, northeast of Japan). *Ni* *En*

M  
8-12117

**Kobe Marine Observatory. Oceanographical Section** (1963)  
*Bull. Kobe Mar. Obs.*, (170) : 76-109  
 (On storm surges on the coast in charge of the Kobe Marine Observatory).  
*Ni* *En*

Presents data on storm surges on the coast between Wakayama and Yamaguchi Prefectures supplementary to the data contained in the 'Manual of the storm surge on the coast of western Japan'.

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*Bull. Kobe Mar. Obs.*, (170) : 58-75  
 (Reports of the marine meteorological condition of typhoon No. 6118 (the Muroto Typhoon 2) (based on the weather reports from ships)). *Ni En*

Examination of the meteorological conditions prevailing at the time of this typhoon and of the distribution of wind force in Osaka and Tokyo Bays.

- Miyazaki, M.** (1963) M  
8-12119  
*Bull. Kobe Mar. Obs.*, (170) : 33-57  
 (The statistical study on the tracks of typhoon). *Ni En*

Statistical study of the variation in the tracks of typhoons and the speed of movement of their centres. Development of a practical method for forecasting movement of a typhoon.

- Kobe Marine Observatory. Maritime Meteorological Section** (1963) M  
8-12120  
*Bull. Kobe Mar. Obs.*, (170) : 10-32  
 (The results of the marine meteorological observations on board the 'Shumpu Maru' in the Seto-Inland Sea (from Sept. 19 to Oct. 2, 1961, and from Jan. 18 to Feb. 7, 1962)). *Ni En*

Examination of wind and surface water temperature records.

- Schmalz, R. F. & K. E. Chave** (1963) M  
8-12121  
*Science*, 139 (3560) : 1206-7  
 Calcium carbonate: factors affecting saturation in ocean

Results indicate that marine waters are not in equilibrium with the bulk carbonate sediments with which they are in contact, and they are supersaturated with respect to pure calcite. Supersaturation seems to result from a metastable equilibrium between sea water and the most soluble solid phase available locally in excess.

- Osterberg, C., L. D. Kulm & J. V. Byrne** (1963) M  
8-12122  
*Science*, 139 (3558) : 916-7  
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Analyses sediment cores collected at 26 different locations 5 to 35 miles offshore. Finds chromium-51 and zinc-65 as the principal radionuclides. Radioactivity falls off sharply with distance from the mouth of the Columbia River, indicating that the river serves as a common source of the artificial radionuclides.

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- Berthois, L. & Y. Le Guilly** (1963) MF  
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*C.R. Acad. Sci., Paris*, 256 (19) : 4060-3  
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(Oceanography—the stratification of the waters in the estuary of the Loire)

Measurements of the dynamic of estuarine waters.

- Fedorova, G. V.** (1963) MF  
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*Dokl. Akad. Nauk SSSR*, 150 (1) : 168-9  
Vliianie temperatury vody, vozrasta i pola ryb na pogloshchenie i vyvedenie  $C^{14}$  (Absorption and elimination of  $C^{14}$  by fishes, as dependent on their age and sex, as well as on water temperature)

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8-12126  
*Hydraul. Res. Sta. Notes*, (5) : Unpag. 2 p.  
Measuring the rate of sediment transport with radioactive tracers

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A study of the hydraulic aspect of the port of Chittagong.

- Suzuki, S.** (1961) MF  
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*J. Wat. Wks & Sew. Ass., Japan*, 36 (319) : 79-82  
Some physiological characters of a sewage fungus  
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Introduction to subject of sea-water desalination. Chapters are: The composition of natural salt waters; Energy requirements; Scale; Distillation methods; Electrodialysis; Freezing processes; Ion exchange; Miscellaneous methods; Summary and conclusions; Appendix; Bibliography.

**Tanner, W. F.** (1963)  
*Science*, 139 (3549) : 41-2

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Spiral flow in rivers, shallow seas, dust devils, and models

Observed in meandering and braided rivers, very shallow sea water, model experiments. Experimental work also produced standing spiral waves and spouts of water. Geometry of the system, roughness, and turbulence are perhaps dominant in control of spiral flow.

**Tedrow, J. C. F. & F. C. Ugolini** (1963)  
*N.Z.J. Sci.*, 6 (1) : 150-6  
An Antarctic saline lake

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Report of composition of the lake water and discussion of the origin of the salt.

**King, S. F.** (1962)  
*Spec. sci. Rep. U.S. Fish Wildl. Serv.—Fish.*, (399) : 1-22  
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8-12134

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**Briggs, M. H.** (1962)  
*Life Sci.*, (11) : 649-51

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Further organic constituents of filtered lake waters

Analyses on the major components of the organic matter, and also on some minor constituents.

**Satomi, Y.** (1962)  
*Bull. Freshw. Fish. Res. Lab., Tokyo*, 12 (1) : 65-74

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(On the significance of alkalinity as an indicator of freshwater fishery production). Ni De

Examination of data on the relation between alkalinity and yield and fish growth in various Japanese waters.

- Satomi, Y.** (1962) F  
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*Bull. Freshw. Fish. Res. Lab., Tokyo*, 12 (1) : 43-9  
 (Investigations on the alkalinity of freshwaters. 1. Method of estimation of alkalinity from dissolved weak acids excepting carbonic acid). *Ni De*

Discusses the alkalinity value derived from a formula representing the relation between alkalinity, hydrogen ion concentration and weak acids.

- Satomi, Y.** (1962) F  
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Tabulation of values obtained by various investigators studying Japanese waters since 1930, including data on horizontal and annual variation in values. Co 8-12137.

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*Agric. Engng*, (42) : 240-3

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**Petrov, A. D. et al.** (1961)

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(Alcohols and the protective properties of their monomolecular layers against evaporation in reservoirs). *Ru*

WPA 36 (4) 612. The properties of 11 alcohols and alcohol mixtures which could serve as alternatives to hexadecanol for reducing the evaporation of water in reservoirs were investigated.

**Simmer, K.** (1961)

F  
8-12145

*Bes. Mitt. dtsh. gewässerkr. Jb.*, (23) : 106 p.

Contribution to the determination of the laws of flow in natural waters

WPA 36 (4) 614. A detailed study of the factors governing the natural flow of streams. Deals with rainfall, extent and permeability of the drainage area, ground-water and surface run-off, and other factors.

**Agababov, E. A.** (1960)

F  
8-12146

*Vodosnabzh. sanit. Tekh.*, (10) : 45-8

(Tube for rate measurements in sharply curved streams). *Ru*

WPA 36 (4) 617. The design and operation are described of apparatus suitable for determination of rate and direction of flow in a shallow but winding current.

**Agababov, E. A.** (1961)\*

F  
8-12147

*Literaturber. Wass. Abwass.*, 10 : 99

Tube for rate measurements in sharply curved streams

*De* 8-12146.

**Ambühl, H.** (1960)

F  
8-12148

*Schweiz. FischZtg*, (7)

(Fish poisoning. Preservation of samples and first collections). *De*

WPA 36 (4) 679. Describes the methods of sampling and examination recommended in order to discover the cause of death of fish.

**Razumov, S. A.** (1962)

F  
8-12149

*Mikrobiol., Moskva*, (30) : 764-8

Microbial indicators of organic pollution of waters by industrial effluents

WPA 36 (4) 685. Discusses *Cladotrix* and *Sphaerotilus*.



- Suzuki, S.** (1961) F  
8-12150  
*Wat. Supply & Wastes, Japan*, 3 (4) : 55-8  
Ecological studies on aquatic fungi in polluted rivers

WPA 36 (4) 687. Summarizes the results of a study to determine the effect of river pollution (by domestic sewage and industrial waste waters) on the distribution of aquatic fungi. The nitrogen and carbon metabolic requirements of common fungi are tested.

- Suzuki, S., H. Nimura & S. Suzuki** (1960) F  
8-12151  
*J. Wat. Wks & Sew. Ass., Japan*, 35 (313) : 85-8

Ecological studies on the micro-organisms in a river polluted by confectionery wastes

WPA 36 (4) 688.

- Suzuki, S. & S. Suzuki** (1961) F  
8-12152  
*Wat. Supply & Wastes, Japan*, 3 (6) : 23-6

Ecological studies on fungi and bacteria in a river polluted by a paper mill

WPA 36 (4) 689.

- Suzuki, S.** (1960) F  
8-12153  
*J. Wat. Wks & Sew. Ass., Japan*, 35 (314) : 74-6

Microbiological studies of sewage-polluted water: aquatic fungi and bacteria in the Kiryugawa River

WPA 36 (4) 690. Results of a study on the distribution of aquatic Phycomycetes and bacteria in this Japanese river.

- Wollitz, R. E.** (1962) F  
8-12154  
*Proc. Mont. Acad. Sci.*, 22 : 54-81

Effects of certain commercial fish toxicants on the limnology of three cold-water ponds, Montana

Describes effects of toxaphene, and rotenone bearing toxicants.

- Bruce, J. P. & G. K. Rodgers** (1962) F  
8-12155  
*In* 8-03144 : 41-69

Water balance of the Great Lakes system

Discusses importance of such studies, water budgets, precipitation, evaporation, energy budgets, future investigations.

- Csanady, G. T., H. K. Ellenton & R. E. Deane** (1963) F  
8-12156  
*Nature, Lond.*, 196 (4861) : 1305-6

Slicks on lake Huron

Describes observations on streaks of smooth water from which capillary waves are absent.

**Hirose, M. & Y. Shimonura** (1963)F  
8-12157*Bull. Kobe Nar. Obs.*, (170) : 1-9(On the heavy rainfall in Hyogo Prefecture). *Ni En*

Analysis of records of heavy rainfall in this prefecture in the period 1907-1961.

**Miller, D. W., J. J. Geraghty & R. S. Collins** (1962)F  
8-12158

Port Washington, N.Y., Water Information Center, 7 p.

Water atlas of the United States

Maps contain data on physiographic provinces, average annual precipitation, areas of cloud seeding operations, mean annual evaporation, average temperature of groundwater, strontium concentration in streams, and the amount of water used for various purposes. Each map is accompanied by a few paragraphs of explanatory text.

**Linsley, R. K.** (1963)F  
8-12159*Science*, 140 (3563) : 169

Water maps

Re 8-12158.

**Andrews, J. T.** (1963)FG  
8-12160*New Scient.*, 17 (332) : 702-5

Estimating the strength of lake ice

Study of the growth and development of lake ice is a matter of practical importance. Predicting the thickness of the ice from the meteorological conditions is greatly complicated by wide local variations in ice growth.

**U.S. Department of Health, Education & Welfare** (1963)FG  
8-12161*Radiol. Hlth Data*, 4 (4) : 161-223

Contains section on water tabulating data for the month of Oct. 1962 for radioactivity in raw surface waters; also global integrals of fallout, etc.

## PLANKTON

**Galkina, P. A.** (1962)M  
8-12162*Dokl. Akad. Nauk SSSR*, 143 (2) : 479-82

Oplodotvoreníe i razvítie ikry belomorskoi sel'di *Clupea harengus pallasii* n. *maris-albi* Berg (var. a) v vode razlichnoi solenosti (Fertilization and development of eggs of *Clupea harengus pallasii* n. *maris-albi* Berg (var. a) in waters of different salinity)

- Patten, B. C., R. A. Mulford & J. E. Warinner** (1963) M  
8-12163  
*Chesapeake Sci.*, 4 (1) : 1-20  
An annual phytoplankton cycle in the lower Chesapeake Bay

Describes seasonal changes in phytoplankton during 1960 based on data obtained on 24 cruises to five stations.

- Iablonskaia, Ie. A.** (1960)\* M  
8-12164  
*Trud. vsesoiuz. nauch.-issled. Inst. morsk. ryb. Khoz.*, (43) : 150-76  
(The food base in the Aral Sea and its utilization). *Ru*

- Smalley, I. J.** (1963) M  
8-12165  
*Science*, 140 (3565) : 396-7  
Radiolarians: Construction of spherical skeleton

Abstract of paper presented at the annual meeting of the National Academy of Sciences, Washington, D.C., 22-24 April 1963. Skeleton of spherical radiolarians, which consists basically of a network of hexagonally shaped structures, also contains some non-hexagonal structures.

- Sveshnikov, V. A. & Ts'iu Wên-jên** (1963) M  
8-12166  
*Dokl. Akad. Nauk SSSR*, 149 (3) : 738-41  
Rostraria—lichinka *Notopygos* sp. (Amphinomidae, Polychaeta) iz Iuzhno-Kitaiskogo moria (Rostraria—a larva of *Notopygos* sp. (Amphinomidae, Polychaeta) from the South China Sea)

- Vevers, G.** (1963) M  
8-12167  
*New Scient.*, 18 (333) : 32-4  
Spring in the sea

Popular account of vernal plankton blooms.

- Osterberg, C., L. Small & L. Hubbard** (1963) M  
8-12168  
*Nature, Lond.*, 197 (4870) : 883-4  
Radioactivity in large marine plankton as a function of surface area

*Salpa* spp. and *Euphausia pacifica* shown to concentrate zinc-65, most of which originates at Hanford and reaches ocean by way of Columbia River. Animals used in three experiments were collected with a 6 ft. Isaacs-Kidd midwater trawl off the Oregon coasts.

- Plain, G. J. & K. E. Plain** (1963) M  
8-12169  
*Nature, Lond.*, 197 (4872) : 1124-5  
Decay and recovery of luminiscent ability in *Gonyaulax monilata*

Mathematical model is proposed to describe response of dinoflagellate to mechanical stimuli of 1/2-sec duration occurring at regularly spaced time intervals. The results of measurements are compared with the mathematical model.

Galkina, L. A. (1962)

M  
8-12170

PL-480 Int., 15 p.

Effect of salinity on the sperm, eggs and larvae of the Okhotsk herring

*En* 58-6935. Experiments carried out with sperm, eggs, and larvae of the herring which spawn in the northwestern part of the sea of Okhotsk show that the range of salinities tolerated by them without any changes in structure or behavior is very wide, but with quite well-defined limits. Effect of salinity is especially great during fertilization and hatching. Available from the Office of Technical Services, U.S. Department of Commerce, Washington, D.C.

Vinogradov, M. E. &amp; N. M. Voronina (1961)\*

M  
8-12171*Okeanologiya*, 1 (4) : 670-8

(Influence of the oxygen deficit on the distribution of plankton in the Arabian Sea). *Ru*

Vinogradov, M. E. &amp; N. M. Voronina (1962)

M  
8-12172*Deep-Sea Res.*, 9 : 523-30

Influence of the oxygen deficit on the distribution of plankton in the Arabian Sea

*En* 8-12171.

Mileikovskii, S. A. (1961)\*

M  
8-12173*Okeanologiya*, 1 (4) : 679-87

(Character and nature of deep-water populations of eurybathic benthic forms of invertebrates with pelagic larvae taking as an example the Polychaeta *Euphrosyne borealis* Oersted 1843 from the North Atlantic). *Ru*

Mileikovskii, S. A. (1962)

M  
8-12174*Deep-Sea Res.*, 9 : 531-7

Character and nature of deep-water populations of eurybathic benthic forms of invertebrates with pelagic larvae taking as an example the Polychaeta *Euphrosyne borealis* Oersted 1843 from the North Atlantic

*En* 8-12173.

Furuhashi, K. (1962)

M  
8-12175*J. Mar. met. Soc., Kobe*, 37 (2)

(On the distribution of some plankton animals in the Kuroshio region south of Honshu, Japan, with notes on the nature and origin of the cold water mass appearing in the region. 1. The distribution of copepods and chaetognaths). *Ni En*

Consideration of quantity of plankton; occurrence of copepods, chaetognaths and appendicularians and their indication of water masses, vertical distribution and seasonal fluctuation of these groups. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (8).



**Furuhashi, K. (1962)**

M  
8-12176

*J. Mar. met. Soc., Kobe*, 37 (3)

(On the distributions of some plankton animals in the Kuroshio region south of Honshu, Japan, with notes on the nature and origin of the cold water mass appearing in the region. 1. The distribution of copepods and chaetognaths). *Ni En*

Co 8-12175. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (9).

**Furuhashi, K. (1962)**

M  
8-12177

*J. Mar. met. Soc., Kobe*, 37 (4)

(On the distribution of some plankton animals in the Kuroshio region south of Honshu, Japan, with notes on the nature and origin of the cold water mass appearing in the region. 1. The distribution of copepods and chaetognaths). *Ni En*

Co 8-12176. Issued also as: *Bull. Kobe Mar. Obs.*, (169) repr. (10).

**Imajima, M. (1961)**

M  
8-12178

*J. Hokkaido Gakugei Univ.*, 12 (1) : 4-10

Notes on some pelagic polychaetes collected in the Japan Trench

Ill. morphological descriptions. Issued also as: *Contr. Shirikishinai Mar Sta.* (9).

**Imajima, M. (1962)**

M  
8-12179

*Rep. JEDS*, 3 (22)

Notes on some pelagic polychaetes collected in the Japan Trench

Ci 8-12178.

**Pillai, N. K. (1961)**

M  
8-12180

*Bull. Res. Inst. Univ. Kerala, (C)*, (8) : 15-35

Additions to the Mysidacea of Kerala

Ill. morphological description of 12 spp., of which 6 are new, with keys to some of the genera to which these spp. belong.

**Balakrishnan, K. P. (1961)**

M  
8-12181

*Bull. Res. Inst. Univ. Kerala, (C)*, (8) : 131-9

Fish eggs and larvae collected by the research vessel 'Conch' during 1958-61. 1. Larvae of *Cynoglossus semifasciatus* Day

Ill. morphological description of larvae in the range 2-12.5 mm of *Cynoglossus semifasciatus* Day.

- M  
8-12182
- Saraswathy, M.** (1961)  
*Bull. Res. Inst. Univ. Kerala, (C), (8) : 141-6*  
Observations on the genus *Ratania* (Copepoda) with a description of the type species  
Ill. morphological description of female and male specimens.
- M  
8-12183
- B.J.M.** (1963)  
*Aust. nat. Hist., 14 (5) : 164*  
Rare whale washed up on Sydney beach  
Note of an adult male strap-toothed whale (*Mesoplodon layardi*) washed up on a beach at 33° 41' S, 151° 17' E.
- MF  
8-12184
- Karpevich, A. F.** (1960)\*  
*Trud. vsesoiuz. nauch.-issled. Inst. morsk. ryb. Khoz., (43) : 198-218*  
(The biological basis of acclimatization of mysids in the Aral Sea and certain other brackish waters). *Ru*
- MF  
8-12185
- Wetzel, R. G.** (1963)  
*Nature, Lond., 197 (4871) : 1026-7*  
Primary productivity of periphyton  
Difficult problem of assaying biomass and rates of colonization by periphyton in fresh and saline waters has been recognized. Common method used involved measurement of rates of colonization by periphyton on artificial substrata. Literature on this subject recently reviewed by Cooke and Sládečková. Technique utilizing carbon-14 as a tracer was developed for assaying the *in situ* productivity of periphyton *in situ* in lakes and in ponds. Primary productivity of littoral periphyton was determined in a large, saline lake, Borax Lake, of northern California in 1961-62.
- MF  
8-12186
- Cassie, R. M.** (1963)  
*N.Z.J. Sci., 6 (1) : 36-59*  
Multivariate analysis in the interpretation of numerical plankton data  
Two techniques of multivariate analysis (component analysis, and discriminant analysis) are examined with a view to their use in interpretation of quantitative plankton data. Both methods are applied to a specific example, a horizontal sampling traverse from Cook Strait into Wellington Harbour on an incoming tide.
- MF  
8-12187
- Willis, R. P.** (1963)  
*N.Z.J. Sci., 6 (1) : 120-6*  
A small towed net for ocean surface sampling  
The small ocean surface described consists essentially of a 200-mesh nylon net supported by a pair of plastic floats and measuring just over 2 ft. long. When streamed from a ship it samples only the top centimetre of water.

# PLANKTON

- Hilton, S. (1962)** F  
8-12188  
*Trans. Derby nat. Hist. Soc.*, 3 : 9-10  
 Fresh-water studies in Derbyshire. 3. Micro-organisms in Allestree Lake

Three samples from water near the edge of the lake.

- Bayly, I. A. E. (1962)** F  
8-12189  
*Aust. J. Mar. Freshw. Res.*, (13) : 143-97  
 Ecological studies on New Zealand lacustrine zooplankton with special reference to *Boeckella propinqua* Sars (Copepoda : Calanoida)

WPA 36 (4) 582. Results of a study in a small, warm, monomictic, closed, alkaline lake on Mayor Island, off the coast of North Island, New Zealand. Data on morphometry, temperature, and chemical conditions are given, and the vertical distribution of zooplankton biomass and of different planktonic crustacean species at different times of the year are discussed. Aspects affecting the distribution of *Boeckella* are discussed and the zooplankton of this lake are compared with those in a number of lakes on the mainland of New Zealand.

- Schröder, R. (1961)** F  
8-12190  
*Literaturber. Wass. Abwass.*, (10) : 105-6  
 Investigations on the distribution of plankton with the help of the underwater telescope and the echograph

WPA 36 (4) 583. Describes investigations into the distribution of plankton in Black Forest lakes.

- Belyi, N. D. (1963)** F  
8-12191  
*Dokl. Akad. Nauk SSSR*, 149 (5) : 1182-4  
 Razvitie lichinok lesheha i sudaka na bol'shikh glubinakh (Development of breem and zander larvae at great depths)

- Willoughby, L. G. (1962)** F  
8-12192  
*J. Ecol.*, 50 (3) : 733-59  
 The occurrence and distribution of reproductive spores of Saprolegniales in fresh water

Method developed for quantitative estimation of propagules of saprolegniaceous fungi aliquot water samples were incorporated in solid nutrient media and incubated under water. Estimations were made from surface water only, at Windermere Lake. *Saprolegnia* was most conspicuous genus, followed by *Achlya* and *Aphamomyces*. *Dictyuchus* and *Leptolegnia* were obtained occasionally.

- Hild, K. (1960)** F  
8-12193  
*Mikrokosmos*, 49 : 4-7  
 Planktonuntersuchungen an den Kriekenbecker Seen (Plankton investigations in the Kriekenbecker lakes)

Ill. description of phytoplankton.



# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

**Bursche, E.-M., H. Kühl & H. Mann** (1959)

F  
8-12194

*Int. Rev. Hydrobiol.*, 44 : 277-98

Beziehungen zwischen dem Chemismus und der Phytoplanktonentwicklung  
(Correlation between chemism and phytoplankton development in the lower  
Weser).

**Kurian, C. V.** (1961)

F  
8-12195

*Bull. Res. Inst. Univ. Kerala, (C)*, (8) : 55-61

Three species of Cumacea from the lakes of Kerala

Ill. morphological description of 2 new spp. to which a name is given of  
another sp. of which specific identification will later be attempted.

**Hyodo, Y. & N. Egami** (1962)

F  
8-12196

*Zool. Mag., Tokyo*, 71 (10) : 337-8

(Effect of X-irradiation on hatchability of *Oryzias embryos*). Ni En

Experimental measurements of survival and development of embryos  
exposed to various levels of irradiation.

**Reyment, R. A.** (1963)

FG  
8-12197

*Nature, Lond.*, 197 (4866) : 512

Effect of certain environments on the carapace of the freshwater ostracod  
*Cypridopsis vidua* (Müller)

Reports on the effect of environment of the shell of an organism in an  
attempt to elucidate a micropalaeontological aspect. Original material was  
obtained from lake Rönningen, Sweden.

## BENTHOS

**Tabb, D. C., D. L. Dubrow & A. E. Jones** (1962)

M  
8-12198

*Tech. Ser. Fla Bd Conserv.*, (37) : 31 p.

Studies on the biology of the pink shrimp, *Penaeus duorarum* Burkenroad,  
in Everglades National Park, Florida

Methods; postlarvae abundance and movement; juveniles abundance, sex  
ratio, length-weight relationship, mortality, length-frequency; growth,  
movement by tagging, distribution in relation to salinity. Other penaeid  
spp.

**Whitteridge, D.** (1962)

M  
8-12199

*New Scient.*, 15 (306) : 695-6

The brain of the octopus

Re 62-06667.



- Nikitin, V. H.** (1962) M  
8-12200  
*Dokl. Akad. Nauk SSSR*, 143 (4) : 968-71

Kolichestvennoe raspredelenie donnoi makrofauny v Chernom more u beregov Kavkaza (Quantitative distribution of bottom macrofauna in the Black Sea near the shores of the Caucasus)

- Stenzel, H. B.** (1962) M  
8-12201  
*Science*, 136 (3522) : 1121-2  
Aragonite in the resilium of oysters

Orthorhombic  $\text{CaCO}_3$  composes some of fibers of *Crassostrea virginica* Gmelin.

- Lowenstam, H. A.** (1962) M  
8-12202  
*Science*, 137 (3526) : 279-80  
Goethite in radular teeth of recent marine gastropods

X-ray diffraction patterns of denticle material. Species of *Scissurella*, *Perotrochus*, *Haliotis*, *Acmaea*, *Patella*, *Nomacopelta*, *Lottia*, *Fissurella*, *Diadora*, *Nerita*, *Tegula* and *Littorina* were selected for study.

- Bilinski, B. E.** (1962) M  
8-12203  
*J. Fish. Res. Bd Can.*, 19 (3) : 505-10  
Biosynthesis of trimethylammonium compounds in aquatic animals.  
3. Choline metabolism in marine Crustacea

Incorporation *in vivo* of radioactivity into phospholipid-bound choline studied in *Homarus americanus* following intramuscular administration of Na-formate- $\text{C}^{14}$ , glycine-2- $\text{C}^{14}$ , DL-serine-3- $\text{C}^{14}$ , L-methionine-methyl- $\text{C}^{14}$  and choline-methyl- $\text{C}^{14}$ . Choline-methyl- $\text{C}^{14}$  was administered to *Cancer magister*. Co 62-02043, Ci 61-11416.

- Butler, T. H. & J. F. L. Hart** (1962) M  
8-12204  
*J. Fish. Res. Bd Can.*, 19 (3) : 401-8

The occurrence of the king crab, *Paralithodes camtschatica* (Tilesius), and of *Lithodes aequispina* Benedict in British Columbia

Locality records are given of capture of a number of crabs. Extension of the known range of *Lithodes aequispina* to southern British Columbia is reported. As species can be easily confused, figures and anatomical comparisons are provided.

- Cherbonnier, G.** (1959) M  
8-12205  
*Bull. Mus. Hist. nat., Paris*, 31 (4) : 367-72

Echinodermes de La Guyane Française (Crinoides, Astérides, Ophiurides, Echinides, Holothurides) (4<sup>e</sup> Note) (Echinoderms of French Guiana (Crinoidae, Asteridae, Ophiuridae, Echinidea, Holothuria) (4th Note) )

BA 40E (1) 4113. Co 61-12636, Ci 61-01712, Ci 61-01713.

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- M  
8-12206
- Le Roux, A. (1963)**  
*C.R. Acad. Sci., Paris*, 256 (16) : 3499-501  
 Contribution à l'étude du développement larvaire d'*Hippolyte inermis* Leach (Crustacé décapode macroure) (Contribution to the study of the larval development of *Hippolyte inermis* Leach (Crustacea Decapoda Macrura) )
- Preliminary note based on aquarium experiments where five larval stages are described and the effects of food on the development processes are discussed.
- M  
8-12207
- Clarke, M. R. (1962)**  
*Nature, Lond.*, 196 (4852) : 351-2  
 Respiratory and swimming movements in the cephalopod *Cranchia scabra*
- During cruise on ' Discovery II ' in May-Jun. 1962 observations were made on a living specimen, member of ogopsid family Cranchiidae. Squids of this family differ from all other families in having a horizontal partition across mantle cavity which is fused to the ventral midline of the enlarged coelome and to the mantle.
- M  
8-12208
- Tyler, A. V. & D. G. Cargo (1963)**  
*Chesapeake Sci.*, 4 (1) : 52-4  
 Size relations of two instars of the blue crab, *Callinectes sapidus*
- M  
8-12209
- Grant, G. C. (1963)**  
*Chesapeake Sci.*, 4 (1) : 38-42  
 Chaetognatha from inshore coastal waters off Delaware, and a northward extension of the known range of *Sagitta tenuis*
- Five species of chaetognaths are identified from a series of plankton samples taken from inshore coastal waters off Delaware in the fall, winter and spring of 1960-1961. They were *Sagitta serratodentata*, *S. elegans*, *S. minima*, *S. hispida*, and *S. tenuis*. All except *S. tenuis* had previously been reported from the waters of the Delaware Bay region.
- M  
8-12210
- Iablonskaia, Ie. A. (1960)\***  
*Trud. vsesoiuz. nauch.-issled. Inst. morsk. ryb. Khoz.*, (43) : 115-49  
 (The contemporary status of benthos in the Aral Sea). Ru
- M  
8-12211
- Charniaux-Cotton, H. (1963)**  
*C.R. Acad. Sci., Paris*, 256 (19) : 4088-91  
 Endocrinologie—Démonstration expérimentale de la sécrétion d'hormone femelle par le testicule inversé en ovaire de *Talitrus saltator* (Crustacé amphipode). Considérations sur la génétique et l'endocrinologie sexuelles des crustacés supérieurs (Endocrinology—Experimental demonstration of the female hormone secretion by the inverted testicules in the ovary of *Talitrus saltator* (Crustacean amphipod). Considerations on genetic and sexual endocrinology of higher crustaceans)

- M  
8-12212
- Manwell, C.** (1963)  
*Science*, 139 (3556) : 755-8  
Genetic control of hemerythrin specificity in a marine worm

Biochemical polymorphism of coelomic hemerythrin found in sipunculid *Golfingia gouldii*. All individuals have same vascular hemerythrin, which is electrophoretically different from any of the coelomic hemerythrins. Vascular and coelomic hemerythrins of another sipunculid, *Dendrostomum cymodoceae*, have quite different "fingerprints". Embryological and phylogenetic implications are discussed.

- M  
8-12213
- Jones, E. C.** (1963)  
*Science*, 139 (3556) : 764-6  
*Tremoctopus violaceus* uses *Physalia* tentacles as weapons

Immature octopods found with fragments of tentacles of coelenterate attached to the suckers of dorsal arms. Probable method of acquisition, evidence of adaptation for holding the tentacles, and possibility that the octopod uses these as offensive and defensive weapons are discussed.

- M  
8-12214
- McMichael, D. F.** (1962)  
*Aust. nat. Hist.*, 14 (1) : 24-7  
Baler shells

*Melo umbilicatus*, *M. miltonis* and *M. amphora*, appearance and egg production.

- M  
8-12215
- Munda, I.** (1962)  
*Acta adriat.*, 10 (1) : 11 p.

Odnos sadržaja fizoda i reduktivnih supstanca u nekim jadranskim srednjim algama (Relation between the amount of physodes and reducing compounds in some Adriatic brown algae). *En*

Studies of *Cystoseira*, *Fucus*, *Sargassum*, *Dictyota*, *Dictyopteris*, *Padina*, *Halopteris*, *Laminaria*, spp.

- M  
8-12216
- Shimizu, T.** (1962)  
*Bull. Japan Sea Fish. Res. Lab.*, (10) : 47-9  
(Determination of the length of maintenance time with the copulatory traces in stomach of the common squid). *Ni En*

Measurement of the rate at which copulatory traces (empty sperm bulbs and spermatophoric sacs) disappear from the stomach; the work was carried out on 500 individuals kept alive under laboratory conditions.

- M  
8-12217
- Wells, J. W.** (1963)  
*Nature, Lond.*, 197 (4871) : 948-50  
Coral growth and geochronometry



- M  
8-12218
- Wolff, T.** (Ed.) (1962)  
Copenhagen, Danish Science Press, Ltd., 120 p.  
The natural history of Rennel Island, British Solomon Islands. 4.  
  
Incl. paper by J. P. Harding on *Mungava munda* and 4 other n. sp. ostracods from fish stomachs.
- M  
8-12219
- Yaphe, W.** (1963)  
*Nature, Lond.*, 196 (4859) : 1120-1  
Detection of marine alginolytic bacteria
- M  
8-12220
- George, J. D.** (1963)  
*Nature, Lond.*, 197 (4872) : 1124  
Validity of the species *Cirratulus norvegicus* Southern  
  
During investigation into ecology of *Cirriformia tentaculata* (Montagu) it was noticed that young were similar to worms described by Southern.
- M  
8-12221
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MF  
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*Aust. nat. Hist.*, 14 (1) : 3-11

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Popular account of a visit to the island with notes on fauna.

**Millar, R. H. & P. J. Hollis** (1963)

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Abbreviated pelagic life of Chilean and New Zealand oysters

Short notice reporting observations on *O. chilensis* Philippi from Chile and on the New Zealand mud oyster, *O. lutaria* Hutton.

**Walne, P. R.** (1963)

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- Briefly comments on Red Sea exploration, the Nile Delta fish farms, proposed fisheries in Nasser Lake (Aswan) and the Qattara Depression, under current 5-year fisheries development plan.
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Electric 'fence' for fish
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## AQUATIC STOCKS

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BA 39E (6) 25496. During a voyage of the 'Vityaz' in 1959-1960, 24 specimens of *Amphioxides pelagicus* were caught, most of them in the mid-Pacific and northeast of Australia, at depths down to 500 m. The author describes their morphology and distribution.

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*Zool. Zh.*, 40 (9) : 1335-44

O Proiskhozhdenii nekotorykh amfiboreal'nykh treskovykh v sviazi s sostavom ikh parazitofauny (The origin of some amphiboreal gadids and clupeids as related to the make-up of their parasitic fauna)

BA 39E (6) 25510.

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*Referat. Zh. (Biol.) (En Transl.)*, 4I22)

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Ob osobennostiakh oboronitel'nogo povedeniia stai nekotorykh pelagicheskikh ryb (Specific features of the defensive behavior of schools of some pelagic fish)

BA 40A (1) 338.

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*En* 8-12271.

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BA 40E (1) 389.

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*Nauch.-tekhn. Biull. PINRO*, 2/3 (16/17) : 10-3  
 K metodike issledovaniia rannikh stadii promyslovykh ryb (A method for studying the early stages of commercially valuable fishes)

BA 40E (1) 390. Voyages were made in April and May and also in June and July of 1959 and 1960 to study patterns of distribution of larvae of different species of fishes in the North Atlantic and to establish methods for counting them.

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*Referat. Zh. (Biol.) (En Transl.)*, (811)  
 A method for studying the early stages of commercially valuable fishes

*En* 8-12275.

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*Trans. Amer. Fish. Soc.*, 91 (3) : 269-74  
 Sea temperatures and the availability of albacore off the coasts of Oregon and Washington

BA 40E (1) 408. Wide variations which occur in Pacific Northwest albacore (*Thunnus germon*) landings are examined under a hypothesis that annual variations in sea surface temperatures affect the success of fishing.

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Account of experiments on *Squalus acanthias*, *Raja rhina* and *Hydrolagus coliei*, designed to determine the effects of various incubation media and temperatures on the interrenal tissue *in vitro*.



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**Fish, M. P. & W. H. Mowbray** (1962) M  
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*J. Mar. Res.*, 20 (2) : 149-62

Production of underwater sound by the white whale or beluga, *Delphinapterus leucas* (Pallas)

Behavior of 3 captive specimens observed for prolonged periods and sound production recorded. Sonic and physical activities were correlated, and sounds are compared with those of other cetaceans, especially *Tursiops*. Physical analyses for representative sounds presented for 47-minute recording period.

**Anon.** (1962) M  
8-12280  
*France Pêche*, 7 (64) : 79-80

Fiche technique de la taupe et du peau bleue (Fishery cards of *Lamna cornubria* and *Carcharius glaucus*)

Detachable cards, ill., giving biology, habitat, fishing, catch, commercial use of *Lamna cornubria* and *Carcharias glaucus*.

**Aasen, O.** (1962) M  
8-12281  
*Fiskets Gang*, (37) : 5 p.

Norske pigghåmerkinger 1958-61 (Norwegian spiny dogfish marking 1958-61)

Considers the Norwegian taggings of spiny dogfish for the period 1958-61, and presents main results.

**Klawe, W. L.** (1962) M  
8-12282  
*Ciencia, Méx.*, 21 (4) : 180

Bonito juvenil (*Sarda chiliensis*) en las aguas del sur de Baja California (Juvenile bonito, *Sarda chiliensis*, in the waters of Baja California)

Ci 59-5364, 61-12830, 62-00952 and 62-01468. Note on specimen captured 5 Apr. 1960.

**Ximénez, I.** (1962) M  
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*Rev. Inst. Invest. pesq. Fac. Vet., Montevideo*, 1 (1) : 35-44

Notas sobre elasmobranchios—1. Cuadro sistemático y sinonímico provisional de los seláceos de la costa uruguaya (Notes on Elasmobranchii—1. Systematic list and provisional synonymy of the sharks of the Uruguayan coast)

A list incl. a key to the identification of spp.

Vaux, D. (1962)

M  
8-12284

*Spec. Rep. sth. pelag. Proj. C.S.I.R.O.*, (2) : 9 p.

Results of tuna search programme, 1961

Programme conducted on New South Wales coast in 1961-62. Report is summary of all information gathered through the control centre and from such log books as have been made available to CSIRO.

Anon. (1962)

M  
8-12285

*Mondo sommerso*, 4 (10) :

Atlante dei pesci delle coste italiane (Fish atlas of the Italian coasts)

Detachable cards, ill., with notes on morphology, reproduction, nutrition and geographical distribution of *Cepola rubescens* L., *Torpeda nobiliana* Bonaparte, *Blennius sphinx* Cuvier & Valenciennes, *B. pavo* Risso.

Ansell, A. D. (1962)

M  
8-12286

*New Scient.*, 14 (288) : 408-9

An approach to sea farming

Progress report on experiments using flue gas from power station and fertilizers to promote growth of marine algae (*Phaeodactylum*) shows it promises to be an efficient way of producing food. Clams, *Venus mercenaria*, are now being fed with the algae to convert the crop into a more nutritious and palatable form.

Bohl, H. (1961)

M  
8-12287

ICES, Comparative Fish. Comm., No. 88, mimeo, 11 p.

German mesh selection experiments on redfish 1961

'Anton Dohrn' cruise, July-August, to Denmark Strait. Trawl cod-ends were perlon or manila, double braided or knotless single. Covered cod-end experiments. Special reference to meshing problem and relation of numbers and sizes of meshed fish to size of catch. Variability of mesh size within knotless cod-ends.

Frade, F. & H. Vilela (1962)

M  
8-12288

*Estud. Jta. Invest. Ultramar*, (98) : 92 p.

Le thon rouge et le germon *Thunnus thynnus* (L.) et *Germo alalunga* (Bonn.) morphologie, biologie et pêche (The bluefin tuna and the albacore *Thunnus thynnus* (L.) and *Germo alalunga* (Bonn.) morphology, biology and fisheries). Fr En

Do 60-181me. Synopsis of biological data containing information on systematics, distribution, bionomics and life history, populations and exploitation. Contains also a summary of discussion and recommendations of the symposium on Thunnidae, Dakar, 12-17 Dec. 1960.

M

**Berger, T. S., B. A. Popov & R. A. Cheremisina** (1962)

8-12289

*Dokl. Akad. Nauk SSSR*, 143 (4) : 965-7

Novye dannye o severnoi granitse rasprostraneniia molodi treski, pikshi, okunia i sel'di v Barentsevom more (Recent data on the northern limits of distribution area of young cod, haddock, redfish and herring in the Barents Sea)

M

**Burtsev, I. A.** (1962)

8-12290

*Dokl. Akad. Nauk SSSR*, 144 (6) : 1377-9

O vosproizvoditel'noi sposobnosti gibrida osetra so sterliad'iu (On the reproductive ability of the hybrid between *Acipenser guldenstaedtii* and *A. ruthenus*)

M

**Kolosova, A. A.** (1962)

8-12291

*Dokl. Akad. Nauk SSSR*, 145 (5) : 1148-50

Afferentnaia innervatsiia serdtsa chernomorskikh akul i skatov (Afferent heart innervation in Black Sea sharks and rays)

M

**Anokhina, L. E.** (1962)

8-12292

*Dokl. Akad. Nauk SSSR*, 142 (6) : 1412-5

Nekotorye voprosy plodovitosti sel'di Onezhskogo zaliva (Some aspects of the fertility of herring in the Onega Bay)

M

**Bogdanov, G. A.** (1962)

8-12293

*Dokl. Akad. Nauk SSSR*, 144 (3) : 652-5

Izmeneniia faktora zhirnosti belomorskoii sel'di v sviazi s sostoianiem polovykh produktov (Variations of the fatness factor of the White Sea herring in connexion with the state of its sexual products)

M

**Vartapetian, B. B.** (1962)

8-12294

*Dokl. Akad. Nauk SSSR*, 143 (3) : 721-3

Skorost' vodoobmena u morskoi kostostoi ryby (The rate of water metabolism in marine teleostei fish)

M

**Tibbo, S. N.** (1962)

8-12295

*J. Fish. Res. Bd Can.*, 19 (3) : 517-8

New records for occurrence of the white-tip shark, *Pterolamiops longimanus* (Poey), and the dolphin, *Coryphaena hippurus* L., in the Northwest Atlantic

*Pterolamiops* caught near eastern edge of Georges Bank on 10 Oct. 1961 from 'A. T. Cameron' on a surface line trawl using mackerel as bait. In same area and date *Coryphaena* caught with handlines.

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8-12296*J. Fish. Res. Bd Can.*, 19 (3) : 515-6Trichodinids from the gills of a new host the lingcod *Ophiodon elongatus*

October 1960 mortalities of "jigged" lingcod held in livewells.

**Thomson, J. A. (1962)**M  
8-12297*J. Fish. Res. Bd Can.*, 19 (3) : 497-500On the fecundity of Pacific cod (*Gadus macrocephalus* Tilesius) from Hecate Strait, British Columbia

Egg counts on 46 mature females. Log-log relationship between egg number and body length. Little difference in number of eggs per unit body length, between cod from Hecate Strait and stocks from colder regions of the Pacific to the north and west. Comparison fish from Hecate Strait and west Kamchatka shows that former mature at a much smaller size. Since egg number is related to size, it is concluded that cod stocks of Hecate Strait have a much lower reproductive potential than do other populations in the North Pacific.

**Fridriksson, A. (1963)**M  
8-12298*Ann. biol., Copenhagen*, 18 (1961) : 210 p.

Contains series of short papers dealing with hydrography, plankton and benthos, and fish in the various sub-areas of the N.E. Atlantic; incl. chairmen's summaries of sub-area reports to ICES, and a general introduction by the Secretary-General; main spp. dealt with are herring, cod, haddock, whiting, redfish, plaice, soles, salmon, trout, oysters, tuna, sardines, mackerel and sprats. Authors are: J. Jónsson, E. Bertelsen, W. Ciegiewicz, E. Bratberg, F. Hermann, U. Stefansson, G. Dietrich, A. P. Alekseyev, B. V. Istoshin, L. R. Shmarina, A. G. Kislyakov, L. I. Borovaya, J. Smed, R. E. Craig, H. Thomsen, A. Svansson, R. B. Burns, R. Johnston, A. Glowinska, A. E. Antonov, J. Krey, A. A. Degtyaryova, E. A. Pavshits, S. S. Drobicheva, G. T. D. Henderson, T. Lovegrove, J. H. Fraser, J. A. Adams, R. S. Glover, J. M. Colebrook, G. A. Robinson, M. H. Williamson, Z. Ringer, I. I. Nikolaev, S. O. Apiné, H. K. Krievs, J. Corlett, P. M. Hansen, A. D. McIntyre, G. Krefft, Aa. J. C. Jensen, O. Aasen, P. F. Meyer-Waarden, B. B. Rae, J. M. Lamont, R. Kändler, Z. Reimann, A. Peczalska, A. Kotthaus, U. Schmidt, A. S. Baranenkova, A. Meyer, V. P. Ponomarenko, St. Rutkiewicz, G. B. Grauman, M. A. Sonina, R. Jones, R. W. Blacker, R. Gambell, B. B. Parrish, O. Dragesund, J. Jakobsson, O. J. Østvedt, F. Devold, I. G. Yudanov, A. Saville, K. Tiews, I. G. Baxter, G. McPherson, K. Schubert, K. H. Postuma, J. J. Zijlstra, Ch. Gilis, J. Popiel, K. Gundersen, J. Hamre, W. G. Hartley, I. Drzyeński.

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*Referat. Zh. (Biol.) (En Transl.)*, 8129

The growth and dynamics of fat accumulation in fishes as adaptive processes (on the basis of an experimental study of the carp in the Volga Delta)

En 8-12375.



F  
8-12377

**Cuerrier, J.-P.** (1962)  
*Nat. Canad.*, 89 (6/7) : 193-214

Inventaire biologique des poissons et des pêcheries de la région du lac Saint-Pierre (Biological inventory of the fishes and fisheries of the Lac Saint-Pierre region)

BA 40E (1) 397. Discussion of fishing methods employed and quantities of the various fish captured; the author discusses sex ratios, maturity, alimentation, size and growth rate, and migration of the lake sturgeon (*Acipenser fulvescens* Raf.). The report of *Dorosoma cepedianum* in Lac Saint-Pierre is a new distributional record.

F  
8-12378

**Darnell, R. M. & R. R. Meierotto** (1962)  
*Trans. Amer. Fish. Soc.*, 91 (3) : 313-20

Determination of feeding chronology in fishes

BA 40E (1) 398. The method is illustrated by studies on a population of young black bullheads (*Ictalurus melas*).

F  
8-12379

**Ehrlich, S.** (1962)  
*Hydrobiologia*, 19 (4) : 316-33

Two experiments in inducing nutria aggregation in unfenced artificial ponds

BA 40E (1) 400. Experiments with *Myocastor coypu*.

F  
8-12380

**Greene, G. N.** (1962)  
*Trans. Amer. Fish. Soc.*, 91 (3) : 326

White bass feeding: Scent or sight

BA 40E (1) 405. White bass, *Roccus chrysops*, in a tank did not respond to the odor of the red shiner, *Notropis lutrensis*, but responded readily to the sight of these shiners.

F  
8-12381

**Kuderskii, L. A.** (1961)  
*Priroda, Moskva*, 11 : 109-11

Rasselenie sudaka po ozeram Karelii (Introducing pike perch into the Karelian lakes)

BA 40E (1) 414.

F  
8-12382

**Kuderskii, L. A.** (1962)\*  
*Referat. Zh. (Biol.) (En Transl.)*, (8192)

Introducing pike perch into the Karelian lakes

*En* 8-12381.

**Lebedev, V. D.** (1961)

F  
8-12383

*Ryb. Khoz.*, 10 : 11-4

O vselenii osetrovykh Sibiri i Dal'nego Vostoka v vodeomy Evropy  
(Acclimatizing acipenserids from Siberia and the Far East in Eastern European waters)

BA 40E (1) 415.

**Lebedev, V. D.** (1962)\*

F  
8-12384

*Referat. Zh. (Biol.) (En Transl.)*, (8I89)

Acclimatizing acipenserids from Siberia and the Far East in eastern European waters

*En* 8-12383.

**Markuze, V. K.** (1961)

F  
8-12385

*Nauch. Dokl. vyssh. Shk. (biol.)*, 3 : 48-50

Sezonnnoe izmenenie vstrechaemosti samtsov i samok ozernoi liagushki  
(*Rana ridibunda* Pall.) (Seasonal change in the occurrence of males and females of the frog *Rana ridibunda* (Pall.) )

BA 40E (1) 419.

**Markuze, V. K.** (1962)\*

F  
8-12386

*Referat. Zh. (Biol.) (En Transl.)*, (8I115)

Seasonal change in the occurrence of males and females of the frog *Rana ridibunda* (Pall.)

*En* 8-12385.

**Poddubnyi, A. G. & V. A. Sakharova** (1961)

F  
8-12387

*Biull. Inst. Biol. Vodokhr.*, 10 : 42-5

O rezul'tatakh akklimatizatsii i usloviakh razmnozheniia sigov v Rybinskom vodokhranilishche (The results of acclimatization and the conditions for reproduction of whitefish in the Rybinsk Reservoir)

BA 40E (1) 425.

**Poddubnyi, A. G. & V. A. Sakharova** (1962)\*

F  
8-12388

*Referat. Zh. (Biol.) (En Transl.)*, (8I90)

The results of acclimatization and the conditions for reproduction of whitefish in the Rybinsk reservoir

*En* 8-12387.

**Sharpe, F. P.** (1962)

F  
8-12389

*Progr. Fish. Cult.*, 24 (2) : 60-4

Some observations of the feeding habits of brown trout

BA 40E (1) 429.

**Sukhoverkhov, F.** (1961)

F  
8-12390

*Rybovod. i Rybolov.*, 6 : 5-8

Voprosy organizatsii rybovodstva (The organization of fish-raising)

BA 40E (1) 435. A rational and scientifically based system for fish-raising applicable at every fish-raising establishment.

**Sukhoverkhov, F.** (1962)\*

F  
8-12391

*Referat. Zh. (Biol.) (En Transl.)*, (8I73)

The organization of fish-raising

*En* 8-12390.

**Titova, K. N.** (1961)

F  
8-12392

*Nauch. Dokl. vyssh. Shk. (biol.)*, 3 : 39-43

Ekologicheskie i morfologicheski osobennosti tarani manychskikh vodo-khranilishch (Ecological and morphological characteristics of the roach of the Manych reservoirs)

BA 40E (1) 439.

**Titova, K. N.** (1962)\*

F  
8-12393

*Referat. Zh. (Biol.) (En Transl.)*, (8I37)

Ecological and morphological characteristics of the roach of the Manych reservoirs

*En* 8-12392.

**Zhdanova, N. N.** (1961)

F  
8-12394

*Ryb. Khoz.*, 10 : 19-22

Ves molodi sudaka, vypuskaemoi iz donskikh nerestovo-vyrastnykh khoziaistv (The weight of young pike perch released from the Don River fish hatcheries)

BA 40E (1) 443.

**Zhdanova, N. N.** (1962)\*

F  
8-12395

*Referat. Zh. (Biol.) (En Transl.)*, (8I75)

The weight of young pike perch released from the Don River fish hatcheries

*En* 8-12394.

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**Babenko, L. O.** (1960) F  
8-12396  
*Visn. Kyyiv. Univ. (Biol.)*, 3 (2) : 116-7

Znakhidka bychka—kruhliaka (*Neogobius melanostomus* Pallas) novoho vyda v raioni seredn'oho Dnipra bilia Kaneva (Finding a *Neogobius melanostomus* Pallas, a species new to the region of the middle Dnieper, near Kanev). *Uk*

BA 40E (1) 4201.

**Babenko, L. O.** (1962)\* F  
8-12397  
*Referat. Zh. (Biol.) (En Transl.)*, (8121)

Finding a *Neogobius melanostomus* Pallas, a species new to the region of the middle Dnieper, near Kanev

*En* 8-12396.

**Louder, D. E.** (1962) F  
8-12398  
*J. Elisha Mitchell sci. Soc.*, 78 (1) : 68-73

An annotated checklist of the North Carolina bay lakes fishes

BA 40E (1) 4213.

**Spanovskaia, V. D.** (1961) F  
8-12399  
*Zool. Zh.*, 40 (10) : 1516-31

Stenofagiia i evrifagiia u ryb podsemeistva Gobioninae (Stenophagia and euryphagia among fish of the subfamily Gobioninae)

BA 40E (1) 4224.

**Spanovskaya, V. D.** (1962)\* F  
8-12400  
*Referat. Zh. (Biol.) (En Transl.)*, 5120

Stenophagia and euryphagia among fish of the subfamily Gobioninae

*En* 8-12399.

**Strawn, K.** (1961) F  
8-12401  
*Tex. J. Sci.*, 13 (2) : 127-59

A comparison of meristic means and variances of wild and laboratory-raised samples of the fishes, *Ethostoma grahami* and *E. lepidum* (Percidae)

BA 40E (1) 4226.

**Stevens, E. D. & O. W. Tiemeier** (1961) F  
8-12402  
*Trans. Kans. Acad. Sci.*, 64 (3) : 218-24

Daily movement of channel catfish, *Ictalurus punctatus* (Rafinesque), in a farm pond

BA 40E (1) 4227.



- Slicher, A. M. & J. N. Ball** (1962)\* F  
8-12403  
*Amer. Zool.*, 2 (3) : 107

Evidence for pituitary-adrenal mediation of leucocytosis induced by cold shock in fishes

Immersion in ice-water elicited marked leucopenia in intact male *Fundulus heteroclitus* and *Mollienesia latipinna*, followed by leucocytosis. Intraperitoneal injections of ACTH (Li) in *Fundulus* produced leucopenia in *Fundulus*, cortisol (5 µg/gwt) induced leucopenia in regressed fish but leucocytosis in breeding fish and in hypophysectomized individuals. Thus pituitary-adrenal axis implicated in bi-phasic cold shock response, but experiments with hypophysectomized fish have demonstrated that only the second phase depends on the pituitary.

- Ushakov, B. P., A. M. Vinogradov & A. A. Kusakina** (1962) F  
8-12404  
*Zh. obshch. Biol.*, 23 (1) : 56-63

Tsitofiziologicheskii analiz vnutrinidnoi differentsirovki omulei i khariusov ozera Baikal (Cytophysiological analysis of intraspecies differentiation in the whitefish and grayling of lake Baikal)

BA 40E (1) 4229. Experiments were conducted on the north Baikal, Selenginsk, and Posolsk types of Baikal whitefish (*Coregonus autumnalis migratorius*, Georgi) and also on the black (*Thymallus arcticus baicalensis* Dyb.) and the white (*Th. a. baicalensis* infrasubspecies *brevipinnus* Svetovidov) Baikal grayling.

- Koroleva, N. V.** (1963) F  
8-12405  
*Dokl. Akad. Nauk SSSR*, 149 (5) : 1185

Izmenenie soderzhaniia belka v syvorotke krovi raduzhnoi foreli v zavisimosti ot vozrasta i pitaniia (Variation of protein content in the blood serum of the trout, as dependent on age and nutrition)

- Carswell, D. J. A.** (1963) F  
8-12406  
*New Scient.*, 18 (333) : 41-2  
Jugged coypu?

Note on its edibility.

- Capon, P. F.** (1963) F  
8-12407  
*New Scient.*, 18 (333) : 42-3  
A fish out of home water

- Baker, B. I.** (1963) F  
8-12408  
*C.R. Acad. Sci., Paris*, 256 (15) : 3356-8

Comportement en culture organotypique des cellules de l'hypophyse de la truite (Behaviour of organotypic culture hypophysis cells of trout)

Preliminary note on results of experiments using cells from *Salmo fario* in three developmental phases.

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**Prowse, G. A.** (1963)

*New Scient.*, 17 (331) : 652

Fish out of home water

F  
8-12409

Remarks on the introduction of fish to areas where they are not indigenous; gives examples on *Tilapia mossambica* in Malacca.

**Podubský, V.** (1959)

*Sborn. čsl. Akad. zeměd. Věd. živ. Vjár.*, 4 (32) : 921-30

Über das Hungern der Fische (Starving of fishes). Ru En

F  
8-12410

Reports on experiments carried out with 20 fish species.

**Dyk, V.** (1961)

Praha, Československá Akademie Zemědělských Věd : 404 p.

Nemoci ryb (Diseases of fishes)

F  
8-12411

Important handbook, very useful for pond fish culture. Introductory parts describe: economical importance of combating fish diseases, history of this branch of knowledge, classification of diseases, the effects of the environmental factors and culture activities on the health status of fish. The main parts contain descriptions of routine investigations, anatomy and pathology of fish, bacterial and viral diseases, pesticides, parasites of fish, both external and internal, dietary diseases, diseases of roe and larvae, anomalies in body structure, diseases of senile age. Finally the review of progress in combating fish diseases as well as bibliography is given.

**MacKay, H. H.** (1963)

Canada, Toronto Bryant Press Ltd., 300 p.

Fishes of Ontario

F  
8-12412

The book presents essential information on the identification, distribution, biology and habitat requirements of the 30 more important species belonging to 14 families. Introductory data, scientific and common names of fish, notes on conservation and managements.

**Čihař, J. & O. Oliva** (1959)

*Sborn. čsl. Akad. zeměd. Věd. živ. Vjár.*, 4 (32) : 889-92

(Growth of bream in the Slapy Reservoir) Ru De En

F  
8-12413

In comparison with other waters growth of *Abramis brama* is very good in the Slapy Reservoir.

**Ball, J. N. & A. M. Slicher** (1963)

*Nature, Lond.*, 196 (4861) : 1331-2

Influence of hypophysectomy and of an adrenocortical inhibitor (SU-4885) on the stress-response of the white blood cells in the teleost fish, *Molluscipinna latipinna* Le Sueur

F  
8-12414

# AQUATIC STOCKS

- Prowse, G. A. (1963)** F  
8-12415  
*Nature, Lond.*, 197 (4872) : 1123  
 Introductions of exotic fish

Ci 61-184me. It was recommended that a register of introductions of exotic fish should be compiled by FAO and that institutions and scientific workers should be asked to assist in this. Author has undertaken to compile list of all introductions of *Tilapia* spp. into countries where they are not indigenous.

- Pequin, L. & A. Serfaty (1962)** F  
8-12416  
*C.R. Soc. Biol., Paris*, 156 : 1167-71

Blood ammonia of fresh-water teleosts following emersion and extreme anoxia

CA 58 (4) : 3711.

- Yoshioka, H. (1962)** F  
8-12417  
*Bull. Fac. Fish. Hokkaido*, 13 (3) : 123-36

On the effects of environmental factors upon the reproduction of fishes.  
 1. The effects of day-length on the reproduction of the Japanese killifish, *Oryzias latipes*

Histological observations on the gonads of fish maintained at steady temperature and exposed to constant number of hours of light per day.

- Shirai, K. (1962)** F  
8-12418  
*Bull. Fac. Fish. Hokkaido*, 13 (3) : 137-52

Correlation between the growth of the ovipositor and ovarian conditions in the bitterling, *Rhodeus ocellatus*

Histological observations on the gonads.

- Tachi, C. (1962)** F  
8-12419  
*Zool. Mag., Tokyo*, 71 (10) : 322-7

(Effects of ionizing radiations upon the sodium metabolism in goldfish, *Carassius auratus* (preliminary report). Ni En

Experimental determination of the net sodium loss of irradiated goldfish compared with that from non-irradiated goldfish.

- Egami, N. et al. (1962)** F  
8-12420  
*Zool. Mag., Tokyo*, 71 (10) : 313-21

(Relationship between survival time after exposure to X-rays and dose of the irradiation in the fishes, *Carassius auratus* and *Oryzias latipes*). Ni En

Experimental measurement of the time to death at different levels of irradiation.

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**Kobayasi, H. & T. Maeda** (1962)

F  
8-12421

*Zool. Mag., Tokyo*, 71 (10) : 307-12

(On the pharyngeal bones and their teeth in Japanese leuciscine and cyprinine fishes (Cyprinidae)). Ni En

Ill. morphological description.

**Hardy, C. J.** (1963)

F  
8-12422

*N.Z.J. Sci.*, 6 (1) : 107-19

An examination of eleven stranded redds of brown trout (*Salmo trutta*) excavated in the Selwyn River during July and August, 1960

Counts were made of the number of egg pockets in each redd, and of the number of ova per pocket and per redd, and note is made of the approximate dimensions of each redd and the position of each egg pocket.

**Weatherley, A. H.** (1963)

FG  
8-12423

*Nature, Lond.*, 197 (4874) : 1253

Notions of niche and competition among animals, with special reference to freshwater fish

*Er* 8-10511.

## MISCELLANEOUS AND AUXILIARIES

**Anon.** (1962)

M  
8-12424

*Science*, 136 (3522) : 1109

[Announcements]

Incl. announcement of post-doctoral fellowships for basic research on systematics and ecology of marine organisms, at Woods Hole.

**Queensland. Laws, Statutes, etc.** (1962)

M  
8-12425

*Qd Govt Gaz.*, (56) : 1579

Order in council amending orders in council made under the fisheries acts 1957 to 1962.—20 December 1962

Amends the orders in council of 14 Mar. 1957, 31 Aug. 1961, 20 Sep. and 15 Nov. 1962, and authorizes the taking of sprats, anchovies, pilchards, herrings or hardiheads by the use of a bait net as prescribed.

**Queensland. Laws, Statutes, etc.** (1962)

M  
8-12426

*Qd Govt Gaz.*, (56) : 1579-80

Order in council amending orders in council made under the fisheries acts 1957 to 1962.—20 December 1962

Amends the orders listed in the schedule, by authorizing the taking of herrings, hardiheads or prawns by the use of a cast (or "umbrella") net, and the taking of sprats, anchovies, pilchards, herrings or hardiheads by a bait net, as prescribed.



# MISCELLANEOUS AND AUXILIARIES

**South Australia. Laws, Statutes, etc. (1962)** M  
8-12427  
*S. Aust. Govt Gaz.*, (52) : 1755

Proclamation, made under the fisheries act, 1917-1962, relating to prohibition of use of fish nets in certain waters.—20 December 1962

Prohibits in the prescribed waters the taking of fish by nets other than a hand crab net. Amends the proclamation of 11 Mar. 1948.

**Caméroun, Federal Republic of. Laws, Statutes, etc. (1962)** M  
8-12428  
*J. off. Caméroun*, (14) : 781

Décret 62-DF-236 définissant les limites des zones de navigation à la pêche.—7 juillet 1962 (Decree 62-DF-236 defining the limits of the sea-fishing zones.—7 July 1962)

Made under ordinance No. 62-OF-30 of 31 Mar. 1962 instituting a code of the Cameroon merchant navy. Provides for three zones as follows: coastal fishing, open sea fishing and high-sea fishing.

**Caméroun, Federal Republic of. Laws, Statutes, etc. (1962)** M  
8-12429  
*J. off. Caméroun*, (15) : 848-51

Décret 62-DF-276 portant réorganisation des services de la marine marchande.—25 juillet 1962 (Decree 62-D5-276, reorganising merchant shipping services.—25 July 1962)

Setting up, within the ministry of transport, of the Cameroon merchant shipping service. This federal service is competent in matters of merchant shipping, sea fishing and inland navigation.

**Chile. Laws, Statutes, etc. (1962)** M  
8-12430  
*Diario ofic., Santiago*, (25.427) : 2728

Decreto No. 592 por el que se deroga el decreto No. 598, de 1960 y reemplaza el No. 837, de 1957.—6 de noviembre de 1962 (Decree No. 592 rescinding decree No. 598 of 1960 and replacing decree No. 937 of 1957.—6 November 1962)

Ci 61-02824. Lays down the membership of the Chilean section of the standing committee on the use and conservation of the marine resources of the South Pacific.

**Chile. Laws, Statutes, etc. (1962)** M  
8-12431  
*Diario ofic., Santiago*, (25.429) : 2822

Decreto No. 670 por el que se deja sin efecto la prohibición o veda a que se refiere el número 618 de 11 de julio de 1961.—11 de diciembre de 1962 (Decree No. 670 cancelling the prohibition or closed season referred to in article 3 of supreme decree No. 618 of 11 December 1962)

Article 3 of the decree concerned prohibition of the catching, between 1 Nov. and 15 Feb. each year throughout the country, of the mollusc *Venus thaca*.

- M  
8-12432
- Denmark. Laws, Statutes, etc. (1962)**  
*Lovtidende A*, (28) : 938

Lov for Faerøerne Nr. 328 om pantsætning af fangst.—2 november 1962 (Act for the Faroe Islands No. 328, concerning the pawning of catch.—2 November 1962). *Da*

- M  
8-12433
- Denmark. Laws, Statutes, etc. (1962)**  
*Lovtidende A*, (30) : 961

Bekendtgørelse Nr. 357 om skovlvodsfiskeri om natten i Tannis bugt.—14 november 1962 (Notice No. 357, concerning shovel net (plaice trawl) fishing by night in Tannis Bay.—14 November 1962). *Da*

For the specified area, grants exception to the prohibition of the use of shovel nets (plaice trawl) by night until 31 Jan. 1963. A minimum mesh width is prescribed.

- M  
8-12434
- Germany. Federal Republic. Laws, Statutes, etc. (1962)**  
*MinistBl. Bundesrepub. Dtsch.*, (1) : 11-5

Richtlinien für die Gewährung von Bundesdarlehen zur Förderung der kleinen Hochsee und Küstenfischerei.—6. Dezember 1962 (Directions for the granting of federal loans for the promotion of small-scale high-seas fishing and coastal fishing.—6 December 1962)

For the modernization of fishing craft and equipment.

- M  
8-12435
- Germany. Federal Republic. Laws, Statutes, etc. (1962)**  
*MinistBl. Bundesrepub. Dtsch.*, (2) : 30-1

Allgemeine Verwaltungsvorschrift zur Aufsicht über die Durchführung der Arbeitsschutzvorschriften des Seemannsgesetzes.—28. Dezember 1962 (General administrative provisions relative to supervision of the execution of work protection provisions of the seafarers' act.—28 December 1962)

Prescribes functions of work protection authorities and collaboration between such authorities and the seafarers' trade union.

- M  
8-12436
- Germany. Federal Republic. Laws, Statutes, etc. (1963)**  
*BundesgesBl., Bonn*, 1 (2) : 17

Verordnung über die Einstufung der pflichtversicherten selbständigen Küstenschiffer in die Beitragsklassen der Rentenversicherung der Arbeiter.—8. Januar 1963 (Order relative to the inclusion of compulsorily insured coastal fishermen in the contributing categories of workers pension insurance.—8 January 1963)

With retroactive effect as from 1 March 1957.

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## Greece. Laws, Statutes, etc. (1961)

M  
8-12437

*Ephem. Kybern.*, 1 (78) : 860-1

(Royal decree No. 267, on the standardisation of sardines, anchovies and other small salted fish.—29 April 1961). *He*

Repeals and replaces royal decree No. 409 of 11 Jun. 1960 on same subject. NE 61-05836.

## Mali. Laws, Statutes, etc. (1962)

M  
8-12438

*J. off. Mali*, (131) : IV-VI

Décret n° 263 P.G.-R.M.-A.E.-P. fixant les valeurs mercuriales pour le calcul des droits d'entrée et taxe *ad valorem* à percevoir à l'importation des produits au Mali pendant la période allant du 1er novembre 1962 au 30 avril 1963.—14 novembre 1962 (Decree No. 263 P.G.-R.M.-A.E.-P. fixing the market values for the calculation of import duties and the *ad valorem* tax on the import of products into Mali during the period 1 November 1962 to 30 April 1963.—14 November 1962)

Incl. canned sardines.

## Mauritania, Islamic Republic of. Laws, Statutes, etc. (1962)

M  
8-12439

*J. off. Répub. Maur.*, (101/102) : 461

Décret n° 62.174 du 26 juillet 1962, relatif à l'organisation et au fonctionnement du service de la marine marchande et des pêches maritimes (Decree No. 62.174 relative to the organisation and operation of the merchant marine and sea fisheries service.—26 July 1962)

Said service to fulfil its tasks within the framework of act No. 62.038 laying down the merchant marine and sea fisheries code.

## Morocco. Laws, Statutes, etc. (1962)

M  
8-12440

*Bull. off. Emp. chérif.*, (2610) : 1536

Dahir n° 1-62-101 du 24 octobre 1962 relatif aux conditions d'octroi ou de maintien de la nationalité marocaine à certains navires de pêche (Dahir No. 1-62-101, relating to conditions for the grant or continuation of Moroccan nationality for certain fishing craft.—24 October 1962). *Es*

An authorization by the minister of merchant marine is required.

## Morocco. Laws, Statutes, etc. (1962)

M  
8-12441

*Bull. off. Emp. chérif.*, (2610) : 1552

Dahir n° 1-62-101 du 24 octobre 1962 relatif aux conditions d'octroi ou de maintien de la nationalité marocaine à certains navires de pêche (Dahir No. 1-62-101, relating to conditions for the grant or continuation of Moroccan nationality for certain fishing craft.—24 October 1962). *Es*

An authorization by the minister of merchant marine is required.

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- Norway. Laws, Statutes, etc. (1962)** M  
8-12442  
*Norsk Lovtid.*, (6) : 85

Kong. resolusjon om endr. i Kronsprinsregentens res. av 24. mars 1961 om norske trålers fiske i området mellom 4 og 6 n. mil utenfor grunnlinjene.—9. februar 1962 (Royal resolution amending the Regent's resolution of 24 March 1961 concerning fishing by Norwegian trawlers in the zone between the fourth and sixth nautical mile from base lines.—9 February 1962). *No*

Restricts the application of the trawl fishing act of 20 April 1951 within said zone.

- Norway. Laws, Statutes, etc. (1962)** M  
8-12443  
*Norsk Lovtid.*, (22) : 426

Kongelig resolusjon om forbud mot å bruke lys ved snurpenotfiske etter sild og fisk i Finnmark.—8. juni 1962 (Royal resolution prohibiting light fishing for herring and other fish in Finnmark.—8 June 1962). *No*

Valid until 1 May 1964.

- Norway. Laws, Statutes, etc. (1962)** M  
8-12444  
*Norsk Lovtid.*, (35) : 744

Kongelig resolusjon om forbud mot fangst av gullflyndre i Røst.—12. oktober 1962 (Royal resolution concerning the prohibition of the fishing of sole in Røst municipality.—12 October 1962). *No*

In force until 1 September 1964.

- Norway. Laws, Statutes, etc. (1962)** M  
8-12445  
*Norsk Lovtid.*, (36) : 760

Kongelig resolusjon om forbud mot fiske med trål i Finnmark fylke mellom 4 og 6 nautiske mil utenfor grunnlinjene.—19 oktober 1962 (Royal resolution prohibiting fishing with trawl in Finnmark Fylke between 4 and 6 nautical miles beyond the coastline.—19 October 1962). *No*

From 1 Nov. 1962 to 1 Mar. 1963.

- Norway. Laws, Statutes, etc. (1962)** M  
8-12446  
*Norsk Lovtid.*, (39) : 806

Kongelig resolusjon em endr. av resolusjon av 26. januar 1962 om maskevidden i tralnøter m.v.—9. november 1962 (Royal resolution amending the royal resolution of 26 January 1962 concerning mesh widths of trawl nets, etc.—9 November 1962). *No*

In respect of tolerances until 1 January 1964.



**Peru. Laws, Statutes, etc. (1962)**

M  
8-12447

*Peruano*, (6482) : 4

Decreto supremo No. 36 por el que se modifica el artículo 815 del reglamento de capitánías y marina mercante sobre licencias para operar en el litoral.—29 de noviembre de 1962 (Supreme decree No. 36 amending article 815 of the maritime authorities and merchant marine regulations on licences to operate in coastal waters.—29 November 1962)

Fixes the cost of licences for foreign ships, including fishing vessels, operating in Peruvian coastal waters.

**South Africa, Republic of. Laws, Statutes, etc. (1962)**

M  
8-12448

*Govt Gaz. S. Afr.*, (402) : 5-6

Goewernmentskennisgewings No. 2100. Wet op reëling van uitvoer van bederfbare produkte, 1962—heffings op bederfbare produkte.—21 Desember 1962 (Government notice No. 2100, made under the perishable products export control act, 1926 (No. 53 of 1926), relative to imposition of levies on perishable products.—21 December 1962). *Af*

Covers fish, shell-fish and crustaceans.

**Sweden. Laws, Statutes, etc. (1962)**

M  
8-12449

*Svensk FörfSaml.*, (579) : 1607-8

Kungl. Maj:ts Kungörelse Nr 579 om undantag från förbudet mot trålfiske vid rikets östra kust.—23 november 1962 (Royal order No. 579, concerning exceptions from the prohibition of trawl fishing on the east coast of the country.—23 November 1962). *Sv*

Notwithstanding the prohibition of trawl fishing in § 5 of fisheries act No. 607 of 24 Sep. 1954, such fishing may take place in the periods Jan.-Apr. and Oct.-Dec. 1963 in certain specified areas.

**Tunisia, Laws, Statutes, etc. (1962)**

M  
8-12450

*J. off. tunis.*, (53) : 1224

Loi n° 62-35 du 16 octobre 1962, modifiant le décret du 26 juillet 1951, portant refonte de la législation de la police de la pêche maritime et délimitation des eaux territoriales de la République Tunisienne (Act No. 62-35, amending the decree of 26 July 1951, revising the legislation on the control of sea fishing and defining the territorial waters of the Republic of Tunisia.—16 October 1962)

Redefines territorial waters and fixes at 12 miles the width of the fishing zone.

**U.K. Laws, Statutes, etc. (1962)**

M  
8-12451

*Stat. Instr., U.K.*, (1452) : 2 p.

The sea fisheries (Scotland) byelaw (No. 65) 1962.—7 May 1962

Permits, on certain conditions, the use of a trawl net for the capture of Norway lobsters in certain waters in the Firth of Clyde.

- M  
8-12452
- U.K. Laws, Statutes, etc. (1962)**  
*Stat. Instr., U.K.*, (1962) : 1 p.

The oil in navigable waters (extension of convention) (Netherlands Antilles) order 1962.—2 October 1962

The international convention for the prevention of pollution of the sea by oil 1954 shall extend to the Netherlands Antilles.

- M  
8-12453
- U.K. Laws, Statutes, etc. (1962)**  
*Curr. Law Statut. annot. U.K.*, 10 & 11 Elizabeth 2, Chap. 31 : 35 p.

Sea fish industry act, 1962: an act to make further provision, by way of financial assistance and otherwise, with respect to the white fish and herring industries, including provision relating to the white fish authority and the herring industry board; to make further provision for the regulation of fishing for, and the landing and commercial use of, sea-fish, and with respect to shell-fish; to enable the charges leviable at certain harbours to be varied, and to facilitate borrowing for certain harbour and marine work undertakings; and for purposes connected with the matters aforesaid.—3 July 1962

Repeals the white fish and herring industries act, 1961, dated 9 May 1961. NE 62-01073.

- M  
8-12454
- U.K. Laws, Statutes, etc. (1962)**  
*Statut. Instrum. U.K.*, (2742) : 2 p.

The sea-fishing industry (landing of immature cod and haddock) order 1962.—17 December 1962

Prohibits the landing of under-sized cod and haddock.

- M  
8-12455
- U.S. Laws, Statutes, etc. (1962)**  
*Treat. inc. Acts Ser. U.S.A.*, (5094) : 9 p.

Measures in furtherance of principles and objectives of the Antarctic treaty. Recommendations adopted at the first consultative meeting under article IX of the Antarctic treaty.—24 July 1961

*Inter alia* recommendation I/VIII concerning need for conservation of living resources in treaty area and including "general rules of conduct for preservation and conservation of living resources in Antarctica".

- M  
8-12456
- U.S. Laws, Statutes, etc. (1962)**  
*Publ. Laws, U.S.A.*, (87-814), 87th Congress, S 2568, 4 p.

An act to amend the act of September 7, 1950 "tuna conventions act of 1950", to extend the regulatory authority of the federal and state agencies concerned under the terms of convention for the establishment of an inter-American tropical tuna commission, signed at Washington May 31, 1949, and for other purposes.—15 October 1962

Regulations required to carry out recommendations of the commission shall be promulgated upon approval of such recommendations by the secretary of state and the secretary of the interior.

M  
8-12457

**Dennel, R.** (1963)  
*Nature, Lond.*, 197 (4871) : 950-1  
Prof. H. Graham Cannon, F.R.S.

Obituary

M  
8-12458

**Woods Hole Oceanographic Institution** (1961)  
Massachusetts, 101 p.  
Bibliography of reports, 1950-60

Available from the Office of Technical Services, Department of Commerce,  
Washington, D.C.

MF  
8-12459

**Waters, J. H.** (1962)  
*Science*, 137 (3526) : 283-4  
Animals used as food by late archaic and woodland cultural groups in  
New England

Gives some idea of exploitation of fish and invertebrates, especially molluscs.

MF  
8-12460

**Sport Fishing Institute, Washington, D.C.** (1961)  
*Items Fish. Sci. Sport Fish. Inst.*, December : 2 p.

Contains notes on research grants for pollution control; comments by W. E.  
Ricker on yield potential of fish stocks; NAS register of American scientists  
interested in overseas assignments; work by S. Snieszko on diagnosis of visceral  
granuloma in hatchery brook trout.

MF  
8-12461

**New South Wales. Laws, Statutes, etc.** (1962)  
*Govt Gaz., N.S.W.*, (126) : 3709-10  
Amendment of regulations made under the fisheries and oyster farms act,  
1935-1960.—15 November 1962

Deletes and replaces regulation 17 and prescribes the length of net and the  
size of mesh which may be used for taking fish by the method of hauling in the  
waters specified.

MF  
8-12462

**New South Wales. Laws, Statutes, etc.** (1962)  
*Govt Gaz., N.S.W.*, (126) : 3714  
Amendment of regulations made under the fisheries and oyster farms act,  
1935-1960.—19 November 1962

In respect of fees for fishing craft licences, for the import of live fish, etc.

**New South Wales. Laws, Statutes, etc. (1962)** MF  
8-12463  
*Govt Gaz., N.S.W.*, (124) : 3632

Proclamation made under the fisheries and oyster farms act, 1935, as amended, relating to certain waters of the Evans River, and of the South Pacific Ocean, County of Richmond.—21 November 1962

Ci 61-08658. Prohibits the taking of fish (a) by means of nets of every description; (b) by hauling nets as prescribed in regulation 17, in the tidal waters and during the periods specified. Repeals the proclamation of 7 December 1960.

**New South Wales. Laws, Statutes, etc. (1962)** MF  
8-12464  
*Govt Gaz., N.S.W.*, (128) : 3780

Proclamation made under the fisheries and oyster farms act, 1935-1960, relating to the whole of the waters of Manly Lagoon, County of Cumberland, Parish of Manly Cove.—28 November 1962

Prohibits the taking of fish by nets of every description, in the tidal waters specified, from 1 Mar. 1963 to 29 Feb. 1968.

**New South Wales. Laws, Statutes, etc. (1962)** MF  
8-12465  
*Govt Gaz., N.S.W.*, (1) : 2

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Harrington Lagoon, Manning River, County of Macquarie.—5 December 1962.

Prohibits in the described waters, from 5 Dec. 1962 to 4 Dec. 1967, the taking of fish by means of spears, spearguns and similar devices and nets of every description other than the prescribed dip or scoop net for the capture of prawns only.

**New South Wales. Laws, Statutes, etc. (1962)** MF  
8-12466  
*Govt Gaz., N.S.W.*, (1) : 1

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Sussex Haven and St. George's Basin, County of St. Vincent.—12 December 1962

Prohibits the taking of fish by nets of every description other than the dip or scoop net prescribed by regulation 25 when used for the capture of prawns only, during the periods specified, beginning 1 Feb. 1963 and ending 31 Jan. 1968.

**New South Wales. Laws, Statutes, etc. (1962)** MF  
8-12467  
*Govt Gaz., N.S.W.*, (1) : 1-2

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Sussex Haven and St. George's Basin, County of St. Vincent.—12 December 1962

Prohibits in the tidal waters and during the periods specified, the taking of fish (a) by means of spears, spearguns and similar devices; (b) by means of meshing nets, as prescribed by regulation 23; (c) by nets of every description.



**Austria. Laws, Statutes, etc. (1963)**

MF  
8-12468

*BundesgesBl. Öst.*, (9) : 44-5

Kundmachung: Verlaut des Beschlusses Nr. 18/1962 des Rates der Europäischen Freihandelsassoziation über einen neuen ursprungsbegründenden Verarbeitungsvorgang für Fischernetze.—8 Feber 1963 (Proclamation of the office of the federal chancellor publishing decision No. 18/1962 of the European Free Trade Association relative to a new qualifying process for fishing nets.—8 February 1963)

Decision taken on 18 Dec. 1962 on the basis of the convention relative to the creation of the European Free Trade Association.

**Quebec. Laws, Statutes, etc. (1962)**

MF  
8-12469

*Statut. Quebec*, 10-11, Eliz. II, 1962 : 163-6

Loi instituant le ministère de la chasse et des pêcheries.—14 mars 1962 (An act to establish the department of game and fisheries.—14 March 1962)

Describes composition and functions.

**Chile. Laws, Statutes, etc. (1962)**

MF  
8-12470

*Diario ofic., Santiago*, (25.370) : 2239-40

Decreto No. 1828 por el que se fijan normas para establecer los precios para los artículos de primera necesidad o de uso o consumo habitual.—17 de octubre de 1962 (Decree No. 1828 laying down rules for the fixing of prices for articles of prime necessity and habitual use and consumption.—17 October 1962)

Includes fisheries preserves.

**Chile. Laws, Statutes, etc. (1962)**

MF  
8-12471

*Diario ofic., Santiago*, (25.428) : 2742-808

Decreto No. 4961 por el que se pone en vigencia la lista nacional de Chile conforme al Tratado de Montevideo y se concede ventajas a productos originarios de Paraguay y Ecuador.—12 de diciembre de 1962 (Decree No. 4961 giving effect to the national list of Chile in accordance with the treaty of Montevideo and granting privileges to products imported from Paraguay and Ecuador.—12 December 1962)

Shows a long list of products, including fisheries products, to which a special tariff is applicable when originating not only from Paraguay and Ecuador but from all countries of the Latin American Free Trade Association.

**Denmark. Laws, Statutes, etc. (1962)**

MF  
8-12472

*Lovtidende A*, (27) : 927-8

Bekendtgørelse Nr. 319 om varer, for hvilke der er meddelt undtagelse fra afgiftspligten efter loven om almindelig omsætningsafgift.—3 oktober 1962 (Notice No. 319, concerning goods exempted from taxes under the act concerning the general transactions tax.—3 October 1962). *Da*

Among the goods declared duty free: packing materials for fishing products, especially for export; rope and other fishing material.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

**Denmark. Laws, Statutes, etc. (1962)** MF  
8-12473  
*Lovtidende A*, (28) : 933

Bekendtgørelse Nr. 326 om foderblandinger til fisk.—24 oktober 1962  
(Notice No. 326, concerning compound fish feeds—24 October 1962). *Da*

In respect of labelling.

**Finland. Laws, Statutes, etc. (1962)** MF  
8-12474  
*Finl. FörfattnSaml.*, (218-221) : 411

Lag N:o 220 angående ändring av lagen om fiske.—9 mars 1962 (Act No. 220, amending the fishing act.—9 March 1962). *Su*

Provides for an annual state appropriation for the promotion of fishing.

**France. Laws, Statutes, etc. (1962)** MF  
8-12475  
*J. off. Répub. franç.*, (265) : 10872

Décret n° 62-1306 réglementant les conditions techniques d'exercice des commerces de produits de la mer et d'eau douce.—6 novembre 1962 (Decree No. 62-1306 regulating technical conditions for the exercise of trade in marine and fresh-water products.—6 November 1962)

Authorizes specified authorities to regulate, by order, the transport, exposure for sale, preparation, storage and delivery of such products.

**France. Laws, Statutes, etc. (1962)** MF  
8-12476  
*J. off. Répub. franç.*, (295) : 12245

Arrêté du 24 novembre 1962 relatif à la coloration du caviar et des suc-cédanés de caviar (Order relating to the colouring of caviar and caviar substitutes.—24 November 1962)

Caviar and caviar substitutes are added to the list of products which may be coloured under the order of 25 March 1958.

**Germany, Eastern. Laws, Statutes, etc. (1962)** MF  
8-12477  
*GesBl. dtsh. dem. Repub.*, 2 (7) : 34

Zweite Verordnung über die Zahlung von Ausgleichsbeträgen an Mitglieder und Beschäftigte landwirtschaftlicher und gärtnerischer Produktionsgenossenschaften sowie von Produktionsgenossenschaften werktätiger Fischer.—19. Dezember 1962 (Second order relative to the grant of compensatory payments to members and employees of agricultural and gardening co-operatives and production co-operatives of professional fishermen.—19 December 1962)

**Germany. Federal Republic. Laws, Statutes, etc. (1962)** MF  
8-12478  
*MinistBl. Bundesrepub. Dtsch.*, (1) : 11

Bekanntmachung Nr. 33-62/63 betreffend Übernahme von Fischmehl aus der Union der Sozialistischen Sowjetrepubliken.—21. Dezember 1962 (Notification No. 33-62/63 relative to the acquisition of fishmeal from the Union of Socialist Soviet Republics.—21 December 1962)

**Mali. Laws, Statutes, etc. (1961)**

MF  
8-12479

*J. off. Mali*, (108) : VII-VIII

Loi n° 61-132 A.N.-R.M. du 31 décembre 1961 portant modification des quotités des droits et taxes fiscaux d'importation en République du Mali (Act No. 61-132 A.N.-R.M. amending the amounts of fiscal import duties and taxes in the Republic of Mali.—31 December 1961)

Applies to long list of products including fish and crustaceans.

**Mali. Laws, Statutes, etc. (1961)**

MF  
8-12480

*J. off. Mali*, (108) : XV

Loi n° 61-125 A.N.-R.M. du 31 décembre 1961, portant création d'une taxe spéciale de consommation sur les produits et marchandises d'importation (décret de promulgation n° 04 P.G.-R.M. du 13 janvier 1962) (Act No. 61-125 A.N.-R.M. establishing a special consumption tax on imported products and goods (Promulgation decree No. 04 P.G.-R.M. of 13 January 1962).—31 December 1961)

Including fresh and frozen fish.

**Mali. Laws, Statutes, etc. (1962)**

MF  
8-12481

*J. off. Mali*, (113) : 254-6

Décret n° 66 P.G.-R.M. du 2 mars 1962, portant création et fixant les modalités du contrôle du conditionnement des produits de l'agriculture, de l'élevage, des eaux et forêts et des industries agricoles du Mali (Decree No. 66 P.G.-R.M. establishing and laying down the terms for the control of the preparing, grading and packing of the products of agriculture, stock-breeding, waters and forests, and agricultural industries of Mali.—2 March 1962)

Provisions of a general nature. Products included are not specified.

**Mali. Laws, Statutes, etc. (1962)**

MF  
8-12482

*J. off. Mali*, (123) : 492-5

Arrêté n° 581 S.E.E.F. du 28 juin 1962, fixant l'organisation et les modalités générales de fonctionnement du service du contrôle du conditionnement des produits de l'agriculture, de l'élevage, des eaux et forêts et des industries agricoles (Order No. 581 S.E.E.F. laying the organization and general terms of operation of the preparing, grading and packing control service for the products of agriculture, waters and forests and agricultural industries.—28 June 1962)

Provisions of a general nature. Products included are not specified.

**Mali. Laws, Statutes, etc. (1962)**

MF

8-12483

*J. off. Mali*, (131) : II-IV

Décret n° 262-P.G.R.M.-A.E.-P. fixant les valeurs mercuriales pour le calcul des droits de sortie et taxe *ad valorem* à percevoir à l'exportation des produits du Mali, pendant la période allant du 1<sup>er</sup> novembre 1962 au 30 avril 1963—14 novembre 1962 (Decree No. 262 P.G.R.M.-A.E.-P. fixing the market values for calculation of export duties and the *ad valorem* tax on the export of products from Mali during the period 1 November 1962 to 30 April 1963.—14 November 1962)

Incl. fish, crustaceans and molluscs.

**Netherlands. Laws, Statutes, etc. (1962)**

MF

8-12484

*Staatscourant, Den Haag*, (242 Suppl.) : 3-4

In- en uitvoerbeschikking produktschap voor vis en visprodukten 1963/Nr. J. 2653.—2 november 1962 (Order No. J. 2653 relative to Import-Export Association for fish and fish products.—2 November 1962). *Ne*

The new order repeals a similar order of 1958.

**Norway. Laws, Statutes, etc. (1962)**

MF

8-12485

*Norsk Lovtid.*, (22) : 425-6

Kongelig resolusjon om endr. i resolusjon av 22. desember 1955 om saltvannsfiskeriene.—8 juni 1962 (Royal resolution amending the resolution of 22 December 1955 on saltwater fishing.—8 June 1962). *No*

Change of closed seasons and of closed areas.

**Peru. Laws, Statutes, etc. (1962)**

MF

8-12486

*Peruano*, (6451) : 2

Resolución ministerial No. 4965 por la que se aprueba el reglamento del decreto supremo No. 11 de 29 de agosto de 1962, sobre fábricas de harina de pescado.—27 de septiembre de 1962 (Ministerial resolution No. 4965 approving the regulation to supreme decree No. 11 of 29 August 1962 relative to fishmeal plants.—27 September 1962)

Extensive provisions concerning the granting of licences, technical inspections to be carried out, and the transfer and registration of fishmeal plants, supreme decree No. 11 referred to above has not yet been published in *Peruano*.

**Spain. Laws, Statutes, etc. (1962)**

MF

8-12487

*Bol. ofic. Estado, Madr.*, (254) : 14955-7

Orden de 9 de octubre de 1962 por la que se aprueban las normas complementarias que regulan la aplicación de la de obras públicas de 4 de septiembre de 1959 que reglamentaba el vertido de aguas residuales (Order approving the supplementary rules regulating the application of the order of the ministry of public works of 4 September 1959 regulating the evacuation of residual waters.—9 October 1962)

Provisions designed to avoid pollution.



**Sweden. Laws, Statutes, etc. (1962)**

MF  
8-12488

*Svensk FörfSaml.*, (532) : 1519-21

Kungl. Maj:ts Kungörelse Nr 532 om de högsta införselavgifter som statens jordbruksnämnd må bestämma i vissa fall.—30 oktober 1962 (Royal order No. 532, concerning the maximum import tax which may be imposed by the ministry of agriculture in certain cases.—30 October 1962). *Sv*

Includes a variety of fishery products.

**Sweden. Laws, Statutes, etc. (1962)**

MF  
8-12489

*Svensk FörfSaml.*, (560-561) : 1580

Kungl. Maj:ts Kungörelse Nr 561 om upphävande av kungörelsen den 17 juni 1948 (nr 502) angående statsbidrag till vissa åtgärder för fiskets främjande.—16 november 1962 (Royal order No. 561 revoking royal order No. 502 of 17 June 1948 concerning state support for certain measures for fisheries development.—16 November 1962). *Sv*

**Sweden. Laws, Statutes, etc. (1962)**

MF  
8-12490

*Svensk FörfSaml.*, (580) : 1609-10

Kungl. Maj:ts Kungörelse Nr 580 angående ändring i kungörelsen den 21 november 1952 (nr 699) med vissa bestämmelser om storleken av maskor i fiskredskap av nät och om minimimått på fisk m.m.—23 november 1962 (Royal order No. 580, amending order No. 699 of 21 November 1952, containing certain regulations concerning the mesh width of fishing tackle and netting, the minimum size of fish, etc.—23 November 1962)

Measures effective until May 1966.

**Switzerland. Laws, Statutes, etc. (1962)**

MF  
8-12491

*Rec. Lois féd., Berne*, (52) : 1697-743

Arrêté fédéral approuvant les accords tarifaires conclus par la Suisse avec les États-Unis d'Amérique et avec la Communauté économique européenne.—19 décembre 1962 (Federal order approving the customs tariff agreements concluded by Switzerland with the United States of America and the European Economic Community.—19 December 1962)

These agreements cover a wide range of products including fish and fisheries products.

**Switzerland. Laws, Statutes, etc. (1962)**

MF  
8-12492

*Rec. Lois féd., Berne*, (52) : 1744-5

Arrêté du conseil fédéral concernant la mise en vigueur et l'exécution des accords tarifaires conclus avec les États-Unis d'Amérique et la Communauté économique européenne.—21 décembre 1962 (Order of the federal council relative to the coming into force and execution of the customs tariff agreements concluded with the United States of America and the European Economic Community.—21 December 1962)

These agreements come into force on 1 Jan. 1963.

# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

MF

8-12493

## **U.K. Laws, Statutes, etc. (1962)**

*Stat. Instr., U.K.*, (1926) : 14 p.

The preservatives in food (Scotland) regulations 1962.—30 August 1962

Re-enact with amendments the public health (preservatives, etc., in food (Scotland) ) regulations 1925 to 1958. Cover raw fish.

MF

8-12494

## **North Borneo. Laws, Statutes, etc. (1962)**

*Govt Gaz., 2nd Suppl.*, (S35) : 285-7

No. S. 159. The customs duties (exemption) (amendment No. 2) order 1962, made under the customs ordinance cap. 33.—10 December 1962

Various amendments, including ships, boats, barges, accessories thereof, etc.

MF

8-12495

## **U.S. Laws, Statutes, etc. (1962)**

*Fed. Reg. U.S.*, (208) : 10405

Executive order 11059 designating public international organizations entitled to enjoy certain privileges, exemptions, and immunities.—23 October 1962

Under authority of section 1 of the international organizations immunities act the Inter-American Tropical Tuna Commission, the Great Lakes Fishery Commission, and the International Pacific Halibut Commission are designated as public international organizations entitled to enjoy the privileges, exemptions, and immunities conferred by the international organizations immunities act, except those conferred pursuant to sections 4(b), 4(e), and 5(a) of that act.

MF

8-12496

## **Uruguay. Laws, Statutes, etc. (1962)**

*Diario ofc.*, (16461) : 360-A-363-A

Decreto por el que se da una nueva clasificación por grupos, de actividades comprendidas en la ley de consejos de salarios.—26 de julio de 1962 (Decree laying down a new group classification of activities included in the wages councils act.—26 July 1962)

The act concerned is No. 10.449 of 12 Nov. 1943. Industrial activities include fisheries.

MF

8-12497

## **Uruguay. Laws, Statutes, etc. (1962)**

*Diario ofc.*, (16461) : 364-A-365-A

Resolución por la que se dan a publicidad los resultados industriales en 1960.—1.º de agosto de 1962 (Resolution publishing the industrial balance sheet for 1960.—1 August 1962)

Includes fisheries.

# MISCELLANEOUS AND AUXILIARIES

**U.S. Laws, Statutes, etc. (1962)** MF 8-12498  
*Publ. Laws U.S.A.*, (87-682), 87th Congress, H.R. 6413, 1 p.

An act to extend to fishermen the same treatment accorded farmers in relation to estimated income tax.—25 September 1962

Taxes, declaration by fishermen.

**U.S. Laws, Statutes, etc. (1962)** MF 8-12499  
*Publ. Laws U.S.A.*, (87-758), 87th Congress, H.R. 8181, 3 p.

An act to authorize the construction of a national fisheries center and aquarium in the district of Columbia and to provide for its operation.—9 October 1962

Sets up a national fisheries center and aquarium advisory board.

**Upper Volta, Republic of. Laws, Statutes, etc. (1962)** MF 8-12500  
*J. off. Haute-Volta*, (25) : 576-81

Avis n° 456-CIAEM aux importateurs.—20 juin 1962 (Notification No. 456-CIAEM to importers).—20 June 1962

Lays down the list of authorized imports from the European Economic Community for 1962. Includes fish, crustaceans and molluscs.

**Davis, T. F. (1962)** MF 8-12501  
Oak Ridge, Tenn., Atomic Energy Commission, 156 p.  
Radioactive waste processing and disposal. A literature search

Available from the Office of Technical Services, Department of Commerce, Washington, D.C.

**Uchihashi, K., H. Shimamura & A. Honda (1963)** MF 8-12502  
*Bull. Japan Sea Fish Res. Lab.*, (11) : 135  
(Application of Klüver staining method to the fish brain preparation).  
*Ni*

**Khoroshiko, P. N. (1961)** F 8-12503  
*Ryb. Khoz.*, 4 : 22-3  
O ratsional'nom ispol'zovanii kormovykh zapasov Volgi (Efficient use of the stocks of fish food in the Volga)

BA 40E (1) 409.

**Khoroshiko, P. N. (1961)\*** F 8-12504  
*Referat. Zh. (Biol.) (En Transl.)*, (8162)  
Efficient use of the stocks of fish food in the Volga

*En* 8-12503.

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F

**New South Wales. Laws, Statutes, etc. (1962)**

8-12505

*Govt Gaz. N.S.W.*, (128) : 3779

Proclamation made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Cato Creek in the vicinity of the aborigines' reserve, County of Narran.—28 November 1962

Prohibits the taking of fish by nets of every description, in the inland waters specified, from 1 Jan. 1963 to 31 Dec. 1967.

F

**New South Wales. Laws, Statutes, etc. (1962)**

8-12506

*Govt Gaz. N.S.W.*, (128) : 3780

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the waters of Macleay River, Counties of Dudley, Macquarie, Clarke and Vernon.—28 November 1962

Prohibits the taking of fish by nets of every description other than the prescribed dip or scoop net and a 20 ft. hand-hauled net for the capture of prawns only, during the weekends, from 1 Mar. 1963 to 29 Feb. 1968.

F

**New South Wales. Laws, Statutes, etc. (1962)**

8-12507

*Govt Gaz. N.S.W.*, (1) : 1

Proclamation, made under the fisheries and oyster farms act, 1935-1960, relating to the whole of the waters of Cawndilla Creek, County of Menindee.—5 December 1962

Prohibits the taking of fish by nets of every description, in the inland waters specified, from 17 Dec. 1962 to 16 Dec. 1967.

F

**Denmark. Laws, Statutes, etc. (1962)**

8-12508

*Lovtidende A*, (31) : 1007

Bekendtgørelse Nr. 390 om ophævelse af fredningstiden for gedder.—18 december 1962 (Notice No. 390, concerning termination of the closed season for pike.—18 December 1962). *Da*

F

**France. Laws, Statutes, etc. (1962)**

8-12509

*J. off. Répub. franç.*, (263) : 10792-6

Décret n° 62-1296 du 6 novembre 1962 portant règlement d'administration publique pour l'application de l'ordonnance du 25 novembre 1958 en ce qui concerne le stockage souterrain de gaz combustible (Decree No. 62-1296 issuing regulations for application of the ordinance of 25 November 1958, in respect of the underground storage of gas for fuel.—6 November 1962)

Articles 30 and 31 concern the protection of waters against pollution.



MISCELLANEOUS AND AUXILIARIES

F  
8-12510

**Germany. Federal Republic. Laws, Statutes, etc. (1963)**  
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Title 50 CFR—chapter 1—part 33: Sport fishing—Horicon National Wildlife Refuge, Wisconsin and Valentine National Wildlife Refuge, Nebraska.—26 November 1962

New § 33.5 : special regulations; sport fishing; for individual wildlife refuge areas.

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*Science*, 137 (3526) : 278-9

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Method based on phonetics of word is outlined. Utility of scheme lies in speed because of elimination of need of controlled index. Experience gained in operation of system is briefly described.

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*Science*, 139 (3556) : 737-9

What are we looking for?

Attention to the nature of scientific discovery would produce better information retrieval systems. Scientific method is used in research. Research is defined as "the more or less systematic investigation of phenomena intended to add to the sum total of verifiable knowledge". This broad definition excludes experimentation of the trial-and-error type, or pure chance observation.

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**Lambert, J. M. & W. T. Williams** (1962)

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8-12522

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*Nature, Lond.*, 197 (4866) : 428-30

Colour and life

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Short report on the thirteenth annual symposium of the Institute of Biology: "Colour and Life", at Birkbeck College, London. Deals with structural colours and chemical colours; colour and classification in lower plants; photosynthetic pigments; respiratory pigments and colour change in animals; colour perception and behaviour. Includes references on marine and fresh-water experiments.





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## VOLUME 8—MEETINGS: CONGRESSES, CONFERENCES SYMPOSIA

8-001me to 8-143 me

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| <b>IWC</b> (1963)<br>2nd Meeting of the scientific sub-committee  | M<br>8-001me  |
| <b>NAS/NRC (US)/SCOR (ICSU)</b> (1963)<br>Symposium on biogeochemistry  | M<br>8-002me  |
| <b>American Institute for Fishery Research Biologists</b> (1963)<br>Annual meeting  | MF<br>8-003me |
| <b>British Ecological Society/Association of Applied Biologists</b> (1963)<br>Joint meeting on dispersal of animals and plants  | G<br>8-004me  |
| <b>FAO</b> (1963)<br>3rd Session of committee on pesticides   | FG<br>8-005me |
| <b>FAO</b> (1963)<br>Meeting of working party on pesticide residues   | FG<br>8-006me |
| <b>OECD, Committee for scientific research on the causes of fouling and corrosion of ships' hulls and methods of prevention</b> (1963)<br>Meeting of joint group to consider abstracting service to cover documentation on biological fouling and corrosion | M<br>8-007me  |
| <b>British Ecological Society</b> (1964)<br>Winter and annual general meeting   | G<br>8-008me  |
| <b>Challenger Society</b> (1964)<br>217th Scientific meeting  | M<br>8-009me  |
| <b>Challenger Society/Representatives from the Marine Laboratories</b> (1963)<br>Joint meeting  | M<br>8-010me  |

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| <b>UNESCO/Pakistan Academy of Sciences/Union of South Africa/CSIR (1964)</b>              | FM<br>8-011me |
| Symposium on scientific problems of the humid tropical zone deltas and their implications |               |
| <b>NAS (US) (1964)</b>  | M<br>8-012me  |
| Tentative meeting of committee on oceanography  |               |
| <b>North American Wildlife and Natural Resources Conference (1964)</b>                    | MF<br>8-013me |
| Annual Meeting  |               |
| <b>CIESMM (1964)</b>  | M<br>8-014me  |
| Symposium on marine pollution by microorganisms and petroleum products                    |               |
| <b>British Ecological Society (1964)</b>  | MF<br>8-015me |
| Symposium on ecology and the industrial society   |               |
| <b>CCTA, Guinean Trawling Survey, Scientific Committee (1964)</b>                         | M<br>8-016me  |
| 2nd Meeting   |               |
| <b>CCTA/CSA (1964)</b>  | M<br>8-017me  |
| CSA specialist meeting on crustaceans   |               |
| <b>CARPAS (1964)</b>  | M<br>8-018me  |
| 2nd Session   |               |
| <b>Japanese Society of Scientific Fisheries (1964)</b>                                    | MF<br>8-019me |
| Symposium on the hormonal maturation and artificial control of the reproduction of fishes |               |
| <b>FAO (1964)</b>   | M<br>8-020me  |
| Symposium on the significance of fundamental research in successful utilization of fish   |               |
| <b>ICNAF (1964)</b>   | M<br>8-021me  |
| Meetings of the <i>ad hoc</i> group on herring and the assessment sub-committee           |               |
| <b>ICNAF (1964)</b>   | M<br>8-022me  |
| Meeting of the standing committee on research and statistics                              |               |
| <b>ICNAF (1964)</b>   | M<br>8-023me  |
| Meetings of scientific advisors to panels   |               |

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<b>ICNAF</b> (1964) 14th Annual meeting	M 8-024me
<b>FAO</b> (1964) 1st Session of expert panel for the facilitation of tuna research	M 8-025me
<b>International Fisheries Exhibition</b> " Rich is the Sea " (1964)	M 8-026me
<b>International Fisheries Trade Fair</b> (1964) 5th International Fisheries Trade Fair	MF 8-027me
<b>FAO</b> (1964) Meeting on business decisions in fishery industries	MF 8-028me
<b>Pacific Tuna Conference</b> (1964) 15th Conference	M 8-029me
<b>Eastern Pacific Oceanic Conference</b> (1964) Meeting	M 8-030me
<b>Gulf States Marine Fisheries Commission</b> (1964) Meeting	M 8-031me
<b>EIFAC</b> (1964) 2nd Meeting of EIFAC working party on water quality criteria for European freshwater fishes	F 8-032me
<b>University of Toronto, Great Lakes Institute</b> (1964) 7th Conference on Great Lakes research	F 8-033me
<b>EIFAC</b> (1964) 3rd Session	F 8-034me
<b>International Water Supply Association</b> (1964) 6th International water supply congress and exhibition	F 8-035me
<b>British Ecological Society</b> (1964) Summer meeting on freshwater ecology	F 8-036me

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| <b>ABZ (1964)</b><br>29th Annual meeting   | MG<br>8-037me |
| <b>FAO (1964)</b><br>Codex Alimentarius. Expert panel on standards for fish and fishery products   | MF<br>8-038me |
| <b>Sapelo Island Research Foundation Inc./University of Georgia Marine Inst./U.S. Bureau of Commercial Fisheries, Biological Laboratory, Brunswick, Georgia/Atlantic Estuarine Research Society/ASLO (1964)</b><br>Conference on estuaries | MF<br>8-039me |
| <b>UNESCO (1964)</b><br>Meeting of directors of North African marine laboratories and institutions   | Mme<br>8-040  |
| <b>IOC (1964)</b><br>Meeting of the international coordinating group for the International Cooperative Investigations of the Tropical Atlantic (ICITA)   | M<br>8-041me  |
| <b>ASLO (1964)</b><br>27th Annual meeting  | MF<br>8-042me |
| <b>ASAB/American Society of Zoologists, Section on Animal Behaviour (1964)</b><br>Symposium on learning and associated phenomena in invertebrates  | MF<br>8-043me |
| <b>Regional symposium on south-western Atlantic Ocean (1964)</b>   | M<br>8-044me  |
| <b>ICSU/SCIBP (1964)</b><br>1st General meeting on the International Biological Program  | MF<br>8-045me |
| <b>UNESCO (1964)</b><br>(Conference on the organization of research and training of personnel in Africa, concerning the study, conservation and utilization of natural resources)  | MF<br>8-046me |
| <b>N.Y. Academy of Sciences/Eastern Fish Disease Laboratory, Bureau of Sport Fisheries and Wildlife, Leetown (1964)</b><br>Conference on viral diseases of poikilothermic vertebrates  | MF<br>8-047me |
| <b>IPFC (1964)</b><br>11th Session   | MF<br>8-048me |



# MEETINGS

<b>INPFC</b> (1964) 11th Session	MF 8-049me
<b>GLFC</b> (1964) Annual meeting	F 8-050me
<b>ASAB</b> (1964) Annual general meeting	G 8-051me
<b>CIESMM</b> (1964) International colloquium on pollution of the marine environment	M 8-053me
<b>ICES</b> 52nd Statutory meeting	M 8-054me
<b>FAO</b> (1964) Symposium on increasing fish consumption through improved fish handling and distribution	MF 8-055me
<b>Denmark, Ministry of Foreign Affairs</b> (1964) Intergovernmental meeting on a revised convention for the International Council for the Exploration of the Sea	M 8-056me
<b>CIESMM</b> (1964) 19th Plenary meeting	M 8-057me
<b>WMO, Commission for Maritime Meteorology</b> (1964) 4th Session	M 8-058me
<b>SCOR (ICSU)</b> General meeting	M 8-059me
<b>SCOR (ICSU)</b> (1964) Symposium on effect of variations in oceanic circulation on distribution of marine organisms	M 8-060me
<b>UNESCO/IAPO</b> (1965) Joint symposium on tide gauge instrumentation	M 8-061me
<b>GFCM</b> (1965) 8th Session	M 8-062me

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<b>NEAFC</b> (1965) 3rd Session	M 8-063me
<b>IWC</b> (1965) 17th Meeting	M 8-064me
<b>Norway, Ministry of Fisheries</b> (1965) 2nd Official Norwegian fisheries fair	MF 8-065me
<b>ASAB</b> (1964) Meeting on recording techniques in animal behaviour	G 8-066me
<b>UN</b> (1965) 2nd World population conference	G 8-067me
<b>International Association for Quaternary Research</b> (1965) 7th International congress	G 8-068me
<b>IUCN</b> (1964) Meeting of survival service commission	MF 8-069me
<b>Göteborg. University. Marine Botanical Institute</b> (1964) 5th Marine biological symposium	M 8-070me
<b>ICES</b> (1964) Round table discussion on the equation of state of sea water	M 8-071me
<b>IOC</b> (1964) 4th IOC bureau and consultative council meeting	M 8-072me
<b>Indian Ocean Biological Centre</b> (1965) Meeting of consultative committee	M 8-073me
<b>Association of Island Marine Laboratories of the Caribbean</b> (1965) 6th Meeting	M 8-074me
<b>South Africa. Republic/CSIR/India Meteorology Department</b> (1965) Symposium on IIOE meteorology	M 8-075me

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<b>SEASCO (1965)</b>	M 8-076me
3rd Regional meeting of experts from marine laboratories in the south east Asian region	
<b>IOC (1965)</b>	M 8-077me
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<b>IOC (1965)</b>	M 8-078me
Editorial committee on ICITA atlases	
<b>IOC (1965)</b>	M 8-079me
Meeting of working group on the international aspects of Tsunami warning system in the Pacific	
<b>ECOSOC (UN) (1964)</b>	M 8-080me
2nd Session of advisory committee on the application of science and technology to development	
<b>IOC (1965)</b>	M 8-081me
Meeting of a joint IOC/WMO working group on ocean data stations	
<b>UNESCO/SCOR/IAPO/ICES (1965)</b>	M 8-082me
Joint working group on oceanographic tables and standards	
<b>IOC (1965)</b>	M 8-083me
5th IOC bureau and consultative council meeting	
<b>U.A.R. Govt. (1964)</b>	F 8-084me
Aswan development conference	
<b>WHO (1964)</b>	MF 8-085me
Informal working meeting of representatives on conservation and amelioration of natural environments and research into pollution and measures for its control	
<b>Instituto Ecuatoriano de Ciencias Naturales (1964)</b>	MF 8-086me
Simposio nacional de recursos naturales (National symposium on natural resources)	
<b>Challenger Society (1964)</b>	M 8-087me
Annual general meeting	

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| <b>Challenger Society</b> (1964)<br>218th Scientific meeting   | M<br>8-088me  |
| <b>Miami. University. Marine Laboratory</b> (1964)<br>Introduction to the marine environment and description of the physical, chemical and geological aspects as related to marine microbiology. Introduction to marine microbiology | M<br>8-089me  |
| <b>Miami. University. Marine Laboratory</b> (1964)<br>Marine phytoplankton; algae, diatoms, bluegreens; taxonomy and ecology   | M<br>8-090me  |
| <b>FBA (UK)</b> (1964)<br>Annual general meeting   | F<br>8-091me  |
| <b>IUCN</b> (1964)<br>Meeting of executive board   | MF<br>8-092me |
| <b>Miami. University. Marine Laboratory</b> (1964)<br>Fungi and yeasts; distribution, physiology and ecology   | M<br>8-093me  |
| <b>Challenger Society/Representatives from the Marine Laboratories</b> (1964)<br>Joint meeting   | M<br>8-094me  |
| <b>Miami. University. Marine Laboratory</b> (1964)<br>Physiology and ecology of algae and protozoa   | M<br>8-095me  |
| <b>OECD, Committee for scientific research. International co-operation in scientific research</b> (1964)<br>Meeting of water pollution sub-group No. 5 on research on water for bathing, recreational purposes and water sports      | MF<br>8-096me |
| <b>Miami. University. Marine Laboratory</b> (1964)<br>Marine bacteria, distribution, physiology, ecology and cycles of mineralization  | M<br>8-097me  |
| <b>Miami. University. Marine Laboratory</b> (1964)<br>Marine bacteria, cont., and economic aspects of marine microbiology  | M<br>8-098me  |
| <b>U.S. Water Pollution Control Federation</b> (1964)<br>2nd International conference on water pollution research  | F<br>8-099me  |



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<b>Brazilian Academy of Sciences (1964)</b> Symposium on the oceanography of the western south Atlantic	M 8-100me
<b>Atlantic States Marine Fisheries Commission (1964)</b> 23rd Annual meeting	MF 8-101me
<b>FAO/WHO (1964)</b> 2nd Session of Codex Alimentarius commission	G 8-102me
<b>Challenger Society/Representatives from the Marine Laboratories (1964)</b> Joint meeting	M 8-103me
<b>GCFI/International Game Fish Conference (1964)</b> Meeting	MF 8-104me
<b>European Federation for Protection of Waters (1964)</b> Symposium on water protection and country planning	F 8-105me
<b>Council of Europe (1964)</b> 3rd Meeting of the committee of experts for the protection of nature and landscape	G 8-106me
<b>IUCN (1964)</b> Meeting of executive board	MF 8-107me
<b>OECD (1964)</b> Session of Council	MF 8-108me
<b>Commission Internationale des Industries Agricoles (1964)</b> 1er Congrès international des industries agricoles et alimentaires des zones tropicales et sub-tropicales (1st International congress of agriculture and food industries in tropical and sub-tropical areas)	MG 8-109me
<b>AAAS (1964)</b> Meeting	MF 8-110me
<b>Marine Biological Association of India (1965)</b> Symposium on Crustacea	M 8-111me
<b>SCIBP (1965)</b> Meeting of sectional committee on the productivity of marine communities	M 8-112me

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<b>SCIBP (1965)</b> 2nd Meeting	M 8-113me
<b>IMCO (1965)</b> 1st Session of sub-committee on oil pollution	M 8-114me
<b>ACMRR (FAO) (1965)</b> Meeting of working group on direct and speedier estimation of fish abundance	M 8-115me
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<b>SCOR (ICSU)/ACMRR (FAO)</b> Meeting of the joint working group on the general scientific framework for the world ocean study	M 8-121me
<b>ICNAF (1965)</b> Meeting of assessment sub-committee	M 8-122me
<b>ICNAF (1965)</b> Meeting of research and statistics committee	M 8-123me
<b>ICNAF (1965)</b> 15th Annual meeting	M 8-124me
<b>IOC (1965)</b> 2nd Meeting of the IIOE co-ordinating group	M 8-125me

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<b>SCOR (ICSU) (1965)</b> Executive meeting	MF 8-126me
<b>FAO (1965)</b> 44th Session of Council	MF 8-127me
<b>American Fisheries Society (1965)</b> Meeting	MF 8-128me
<b>IOC (1965)</b> Meeting of working group on cooperative investigations of variability in the ocean	M 8-129me
<b>IOC (1965)</b> 4th Session	M 8-130me
<b>GCFI (1965)</b> Meeting	MF 8-131me
<b>SCTR/OAU (1965)</b> Meeting	G 8-132me
<b>Polish Academy of Sciences (1965)</b> 16th Limnological congress	F 8-133me
<b>FAO/ICES/ICNAF (1965)</b> Continuing working party on fishery statistics in the North Atlantic area	M 8-134me
<b>FAO (1965)</b> Meeting of ad-hoc committee of the FAO council on conference resolution No. 8/63	MF 8-135me
<b>ICES (1965)</b> 53rd Statutory meeting	8-136me
<b>Marine Technology Society/ASLO (1965)</b> Conference on ocean science and ocean engineering	8-137me
<b>Conférence internationale sur les hautes pressions (1965)</b>	8-138me
<b>IUGG (1965)</b> 2nd Symposium of CRCM	8-139me

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| <b>UNESCO</b> (1965)  | M<br>8-140me |
| Meeting of experts to plan oceanographic studies in the Mediterranean                         |              |
| <b>UNESCO/Brazilian Academy of Sciences</b> (1965)  | M<br>8-141me |
| Meeting of Latin-American oceanographic laboratories and training centres                     |              |
| <b>ECOSOC (UN)</b> (1965)   | M<br>8-142me |
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| <b>ICSU/CIG</b> (1965)  | M<br>8-143me |
| 6th Geophysical meeting   |              |



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| A.J.S. (1963)                    | 8-10120 | Resources Research. First        |         |
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| Abbamonte, G. (1962)             | 8-04600 | 2 February 1963 (1963)           | 8-06001 |
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| Abe, T. (1962)                   | 8-11198 | Agrawal, V. P. (1963)            | 8-09220 |
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<i>Trinectes</i>		01366	03358		03049	03076	03230	03231
1,84 <i>Icosteus</i>			10337		03232	03234	03237	03239
1,87 <i>Remora</i>			05477		03242	to	03246	03248
1,89 <i>Amanses</i>			03333		to	03251	03254	03256
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<i>Canthidermis</i>			03333		03272	03275	03276	03278
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<i>Xanthichthys</i>			03333		03288	03289	03291	03307
1,90 <b>OSTRACIIDAE</b>			08119		to	03318	03322	03325
<b>TETRAODONTIDAE</b>			05491		03326	03341	03342	03352
1,91 <i>Mola</i>			10274		03354	03416	03417	03426
1,92 <i>Gobiesox</i>			10307		03480	03481	03486	03494
1,93 <i>Opsanus</i>		05498	12310	12311	03496	03498	03499	03501
1,95 <i>Antennarius</i>			03331		to	03506	03508	03509
<i>Antennatus</i>			03331		03510	03514	to	03517
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<b>OGCOCEPHALIDAE</b>			10279		03534	03536	to	03540
1,97 <i>Parapegesus</i>			10224		03543	to	03552	03555
1,99 <i>FISHES, Misc.</i>		01015	01022		03558	03559	03560	03562
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 09188 09191 09196 09207  
 09208 09211 09213 09214  
 09231 09233 to 09236  
 09238 09247 09254 10030  
 10128 10158 10163 10167  
 10168 10183 10188 10221  
 10228 10241 10249 10265  
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 11053 11117 11129 11133  
 11134 11154 11160 11164  
 11368 12128 12149 to  
 12153 12192 12215 12219  
 12241 12244 12246 12247  
 12250 12251 093me  
 095me 097me 098me

## 5. FISHING

### 5.1 *Statistical returns*

01266 01269  
 to 01275 01288 01294  
 01303 02250 02251 02268  
 to 02272 02290 02298  
 02299 02300 02462 03037  
 03230 03234 03235 03236  
 03264 03265 03267 04255  
 04256 04257 04262 to  
 04267 04269 04293 04497  
 04499 05304 05326 06032  
 06274 06280 to 06283  
 06286 06287 06308 07208  
 07210 07216 08275 08276  
 08279 08282 08287 08298  
 09210 09256 09266 to  
 09274 09276 09277 09285  
 09297 09298 09299 11170  
 11182 12254 to 12260  
 022me  
 01257 01263 01278 02252  
 02284 02289 02321 02323  
 03031 03231 03232 03239  
 03242 to 03253 03256

### 5.2 *Vessels*



# BIBLIOGRAPHY FOR AQUATIC SCIENCES AND FISHERIES

5.3 Gear	03262	03263	04228	04230	5.5 Fish technology	01205	to	01208
	to	04238	04281	05300		01282	01283	10320 to
	05313	05319	06285	07201		01324	02253	02254 02255
	08246	to	08263	08379		02277	02287	02291 02292
	09261	09265	09313	09411		02293	02306	02317 to
	11168	007me				02320	03241	03259 03271
	01258	01259	01284	01308		03273	to	03326 04245
	01319	02260	02261	02262		04280	04286	04287 04300
	02273	02276	02282	02286		to	04372	05306 to
	02309	02314	02332	02351		05311	05317	05318 05330
	02365	02546	03233	03254		05331	06233	06273 06276
	03257	03258	04160	04239		06291	06293	to 06301
	to	04244	04261	04271		06309	06311	06313 06563
	to	04274	04276	04278		06564	06565	07184 07189
	04279	04283	04284	04285		07203	07348	08286 08305
	04382	04384	04386	04408		to	08378	08380 to
	04473	04477	04480	04486		08394	08448	08466 09075
	05221	05303	05305	05312		09107	09304	to 09312
	05314	05316	05320	05321		09314	to	09323 09325
	05399	05469	05472	05476		to	09363	09382 09458
	06275	06288	06307	06354		10500	10547	10548 11169
	07183	07200	07217	08244		11174	11185	11189 to
	08265	to	08274	08278		11192	12265	12266 12332
	08280	08281	08284	08285		12406	020me	038me
	08290	08291	08293	08295		102me		
	08296	08297	08300	08460	5.6 Economics of fishing	01300	01312	
	08465	09255	09278	09286		01325	02257	02263 02265
	09324	09401	10535	11166		02275	02315	02316 02322
	11173	11178	11188			03237	03238	03277 04259
5.4 Grounds and fishing surveys				01254		04260	04275	04277 06032
	01255	01256	01262	01263		06285	06303	06528 07192
	01264	01265	01268	to		07211	07216	08294 08301
	01271	01276	10293	01296		08302	08304	09288 09289
	to	01299	01304	01305		09301	10519	10553 12261
	01307	01310	02278	to		028me	055me	109me
	02281	02283	02288	02296	6. AQUATIC STOCKS			
	02531	03037	03229	03255				
	03261	03266	03269	03270	6.0 General biology	01040	01328	01333
	04246	04258	04268	04270		01337	01348	01372 01375
	04277	04281	05019	05295		01380	01381	02264 02344
	05297	05298	05302	05328		02360	02377	02434 02441
	06032	06272	06276	06284		02461	02481	02547 03363
	06287	06288	06289	06292		to	03396	03413 03459
	06302	06305	06312	06411		03460	03464	04282 04429
	07035	07051	07186	07190		04439	04450	04460 04463
	07191	07193	to	07199		04517	04528	04540 04553
	07202	07205	07212	to		05022	05301	05327 05334
	07215	07217	07218	08283		05335	05392	05407 05412
	08298	08303	09260	09275		05413	05414	05421 05433
	09287	09302	09303	10295		05434	05437	05441 05451
	10513	10514	10515	10521		05486	05541	05559 05560
	10522	10530	10539	10540		06243	06327	06329 06339
	10542	10550	10555	11007		06344	06346	06347 06349
	11171	11172	11176	11218		06368	06386	06402 06404
	12261	12262	12263	12319		06409	06415	06438 06445
	12377	016me				06581	07245	07248 07255



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 10410 10443 10444 10448  
 10470 11242 11274 11280  
 12023 12280 12285 12288  
 12303 12322 12327 12328  
 12377 12412

## 6.1 Systematics

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 to 03332 03338 03343  
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## 6.2 Distribution and ecology

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 to 05352 05366 05367  
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10409	10410	10411	10441	05364	05365	05368	to
10471	11196	11197	11234	05374	05376	05379	to
11240	11244	11259	11277	05382	05384	05385	05401
11279	11284	11302	12267	05420	05424	05425	05430
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036me	039me	070me		05524	to	05527	05530
6.3 <i>Physiology and behaviour</i>		01133		05533	05536	to	05539
01286	01311	01315	01340	05542	05547	05551	05552
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01487	01488	01490	01504	06363	06371	06372	06376
01521	01522	01533	to	06378	06382	06383	06384
01539	02045	02152	02159	06389	06392	06396	to
02168	02169	02285	02302	06399	06401	06406	06407
02325	02327	02328	02331	06408	06410	06421	to
02338	02339	02340	02342	06427	06433	06435	06436
02345	02359	02361	02366	06437	06446	06447	06448
to	02370	02378	02409	06452	06453	06454	06456
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02419	02422	to	02425	06471	06476	06477	06478
02427	to	02433	02439	07141	07142	07207	07225
02440	02442	02443	02444	to	07232	07234	07235
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02498	02500	02505	02537	07321	07322	07330	07334
02538	02540	02549	03325	07335	07338	07339	07340
03336	03339	03341	03345	07346	07347	07349	to
03347	03348	03349	03402	07356	07359	07452	08028

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     to 08541 08543 08545  
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 09430 09436 09444 to  
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 12334 12335 12337 12343  
 12347 12350 12354 12361  
 12366 12367 12372 12375  
 12378 12379 12380 12389  
 12403 12404 12405 12408  
 12410 12414 12416 to  
 12420 12422 12502  
 019me 037me 043me

## 6.4 Parasites, diseases, abnormalities

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 01442 01460 01462 01463  
 01505 to 01515 01518  
 01531 01532 02327 02334  
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 05480 to 05484 05494  
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 10501 11194 11195 11233  
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 11275 11281 11303 11307



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11311 11318 12269 12296  
12340 12342 12357 12358  
12363 12369 12411  
047me

## 6.5 Stock fluctuations and population

*studies* 01288 01332 01350 01362  
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02330 02331 02346 02349  
02382 02390 to 02394  
02397 02406 02447 02534  
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03356 03360 03363 to  
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04490 to 04493 04496  
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05373 05376 05377 05401  
to 05406 05410 05415  
05419 05425 05426 05437  
05468 05470 05472 05476  
05510 05512 05574 06027  
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06348 06350 06355 06367  
06369 06370 06394 06400  
06412 06431 06432 06457  
06460 06461 07185 to  
07188 07236 07239 07241  
07243 07244 07246 07251  
07253 07256 07257 07265  
07281 07318 07319 07323  
07324 07345 07349 to  
07358 07360 07454 08274  
08276 08396 08397 08404  
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08430 08443 08460 08486  
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to 10415 10459 10482  
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11229 11230 11235 11236  
11242 11267 11280 11282

11283 11310 11313 11314  
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12325 12344 12346 12349  
12354 12359 12360 12372  
12413 12503 001me  
021me 022me 025me  
029me 115me 122me  
123me

6.6 Selection by fishing gear 0 1267  
08274 08450 10391 12287

6.7 Marking 01361 01440 10458 02356  
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11226 11228 11270 12281

## 6.8 Fisheries for particular species or

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05469 05476 05487 05492  
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11204 to 11214 11216  
11217 11218 11246 11496  
12254 to 12258 12280  
12288 12317 12318 12324



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6.9 *Hatcheries, aquaria, culture* 01456  
 01457 01470 01483 01489  
 01492 to 01496 01503  
 01526 to 01529 02116  
 02304 02307 02308 02311  
 02313 02333 02354 02355  
 02385 02399 to 02402  
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 to 02545 02548 03351  
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 to 07326 07329 07330  
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1951 Sysoev, N. N.	<i>En</i> 8-01080	58-2854	<i>En</i> 8-05520
1951 Goodey, T.	NE 8-12027	58-2901	<i>En</i> 8-05460
1952 Ruud, J. T.	Ci 8-02359	58-2903	Ci 8-03061
1952 Lomakina, N. B.	<i>En</i> 8-10039	58-2943	Ci 8-03403
1953 Berkson, J.	Ci 8-02568	58-3187	Ci 8-03348
1954 Lapinskaya, E. M.	<i>En</i> 8-03273	58-3250	<i>En</i> 8-09060
1954 Andrewartha, H. G.	Ci 8-10511	58-3390	<i>En</i> 8-01292
1954 Bauer, O. N.	<i>En</i> 8-10481	58-3391	<i>En</i> 8-01292
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1956 Mironova, N. V.	<i>En</i> 8-01367	58-6786	Co 8-07043

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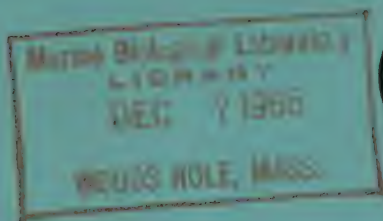
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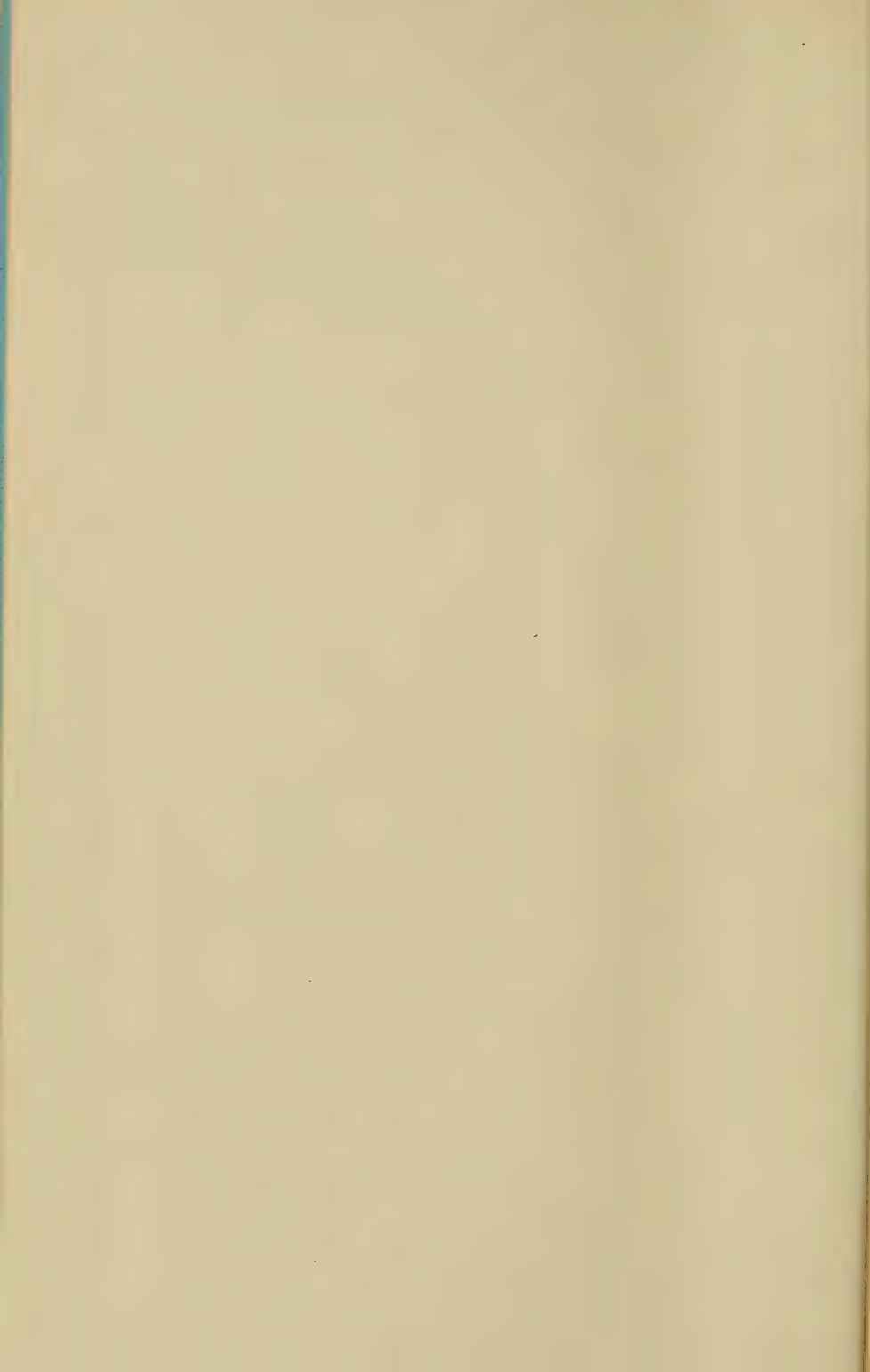
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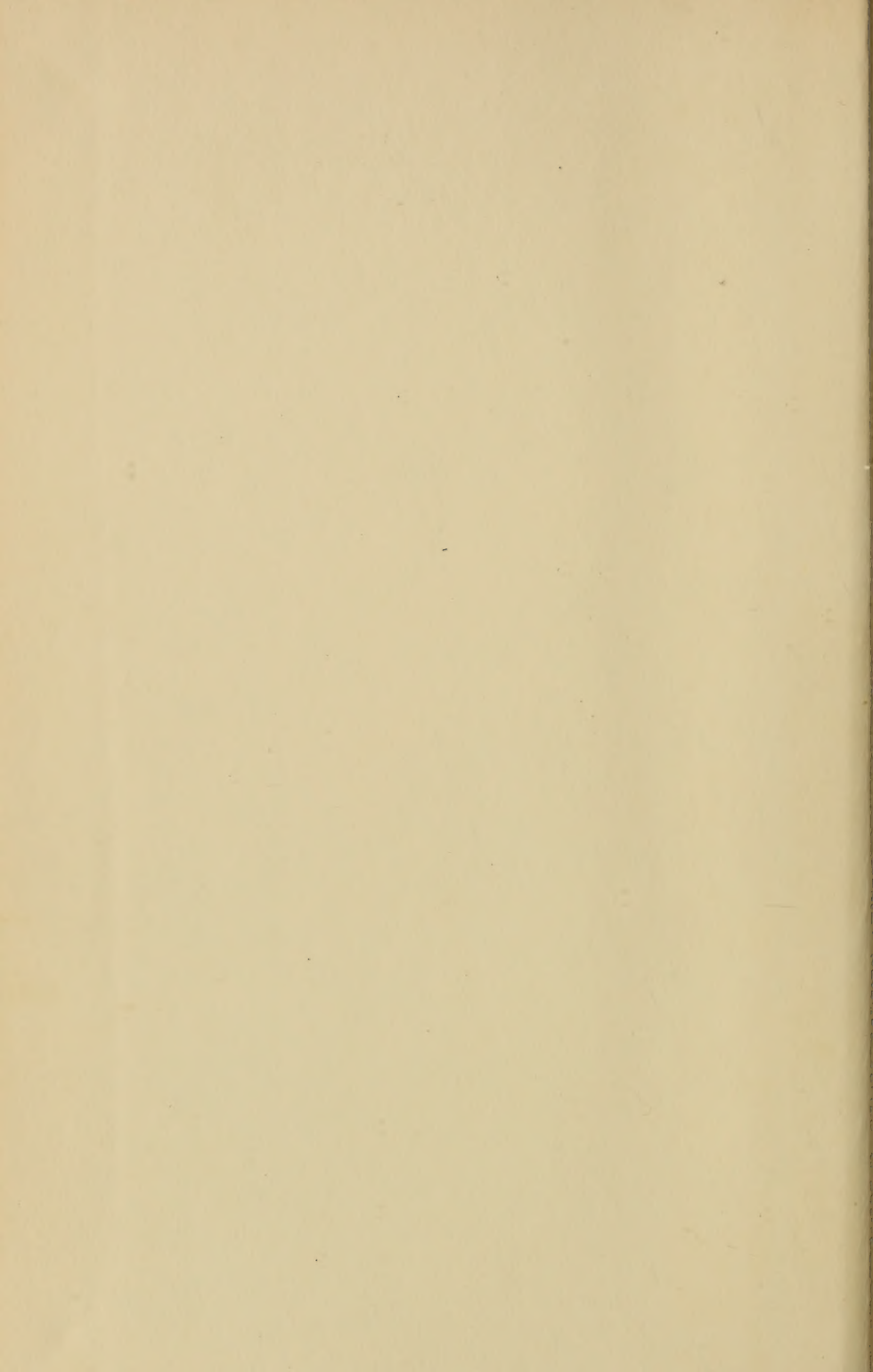
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